

FIG. 1A
PRIOR ART

122	G	G	S+	S-	G	G	111
122	S+	S-	G	G	S+	S-	112
122	G	G	S+	S-	G	G	113
122	S+	S-	G	G	S+	S-	114
122	G	G	S+	S-	G	G	115
	S+	S-	G	G	S+	S-	116

FIG. 1B
Prior Art

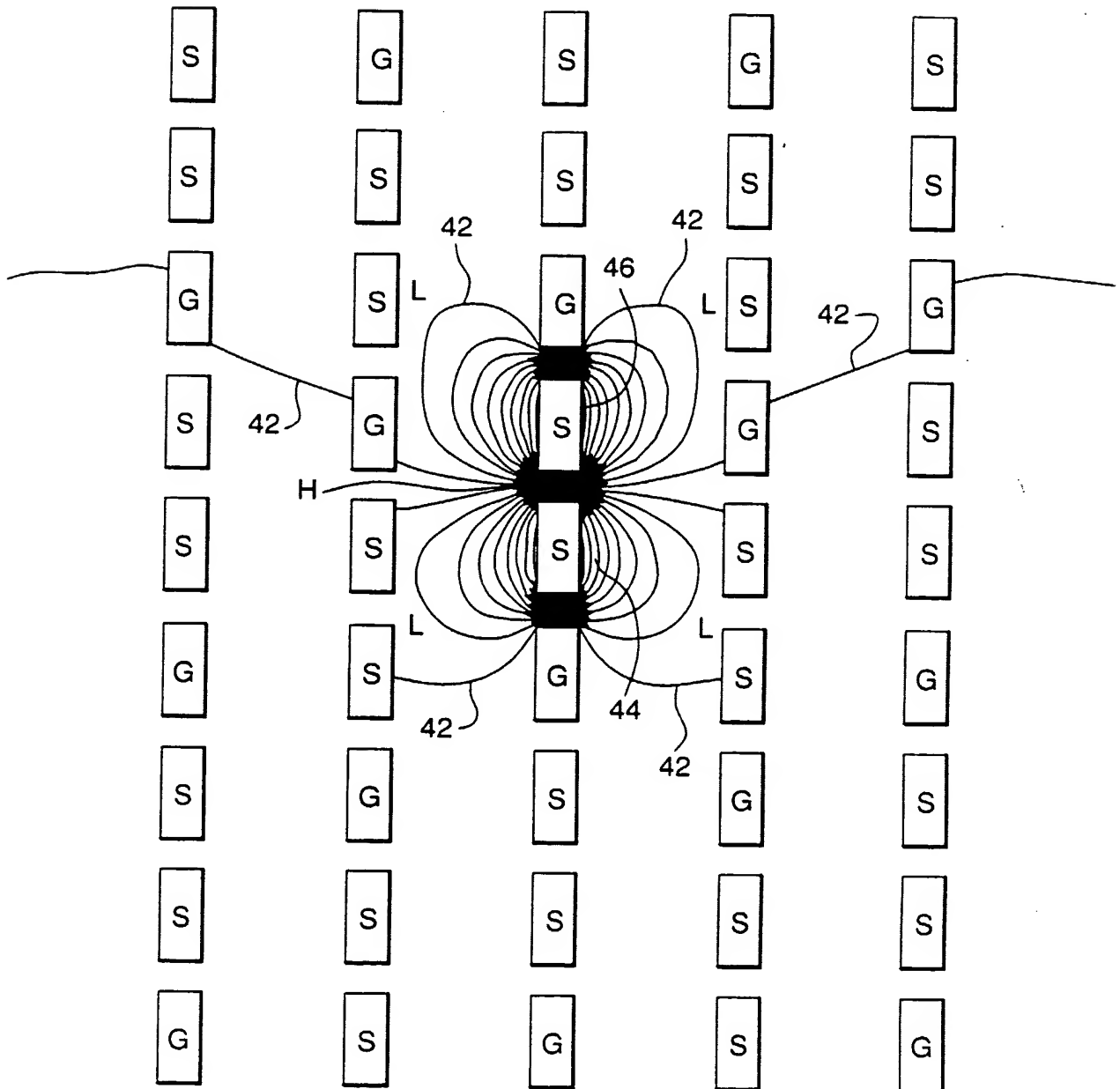


FIG. 2B

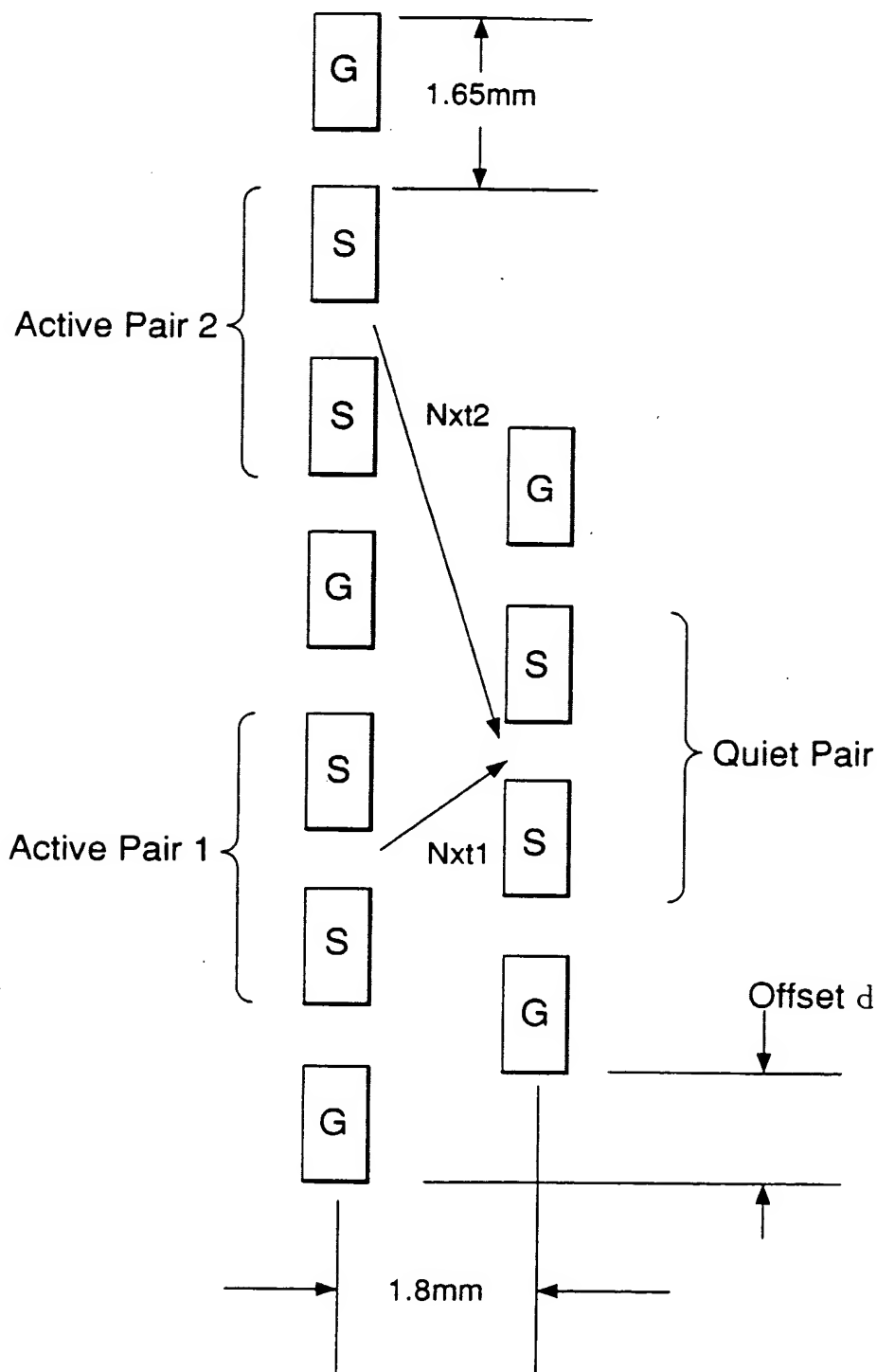


FIG. 3A

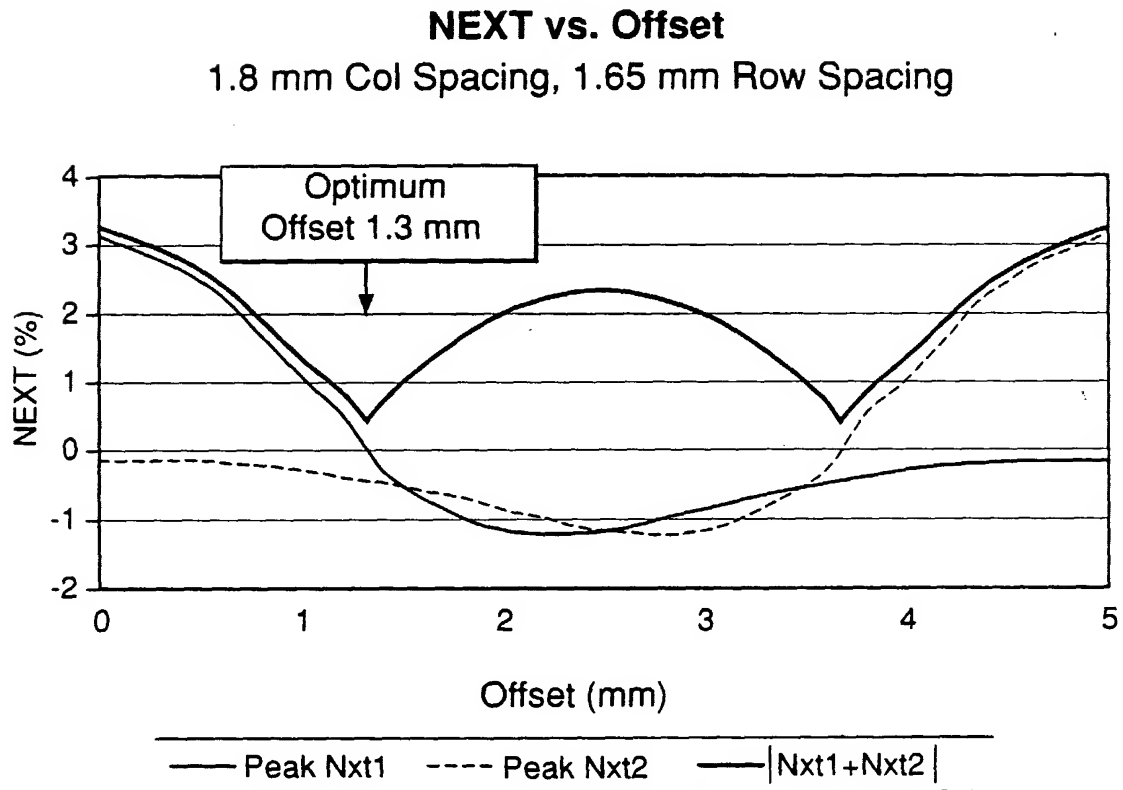


FIG. 3B

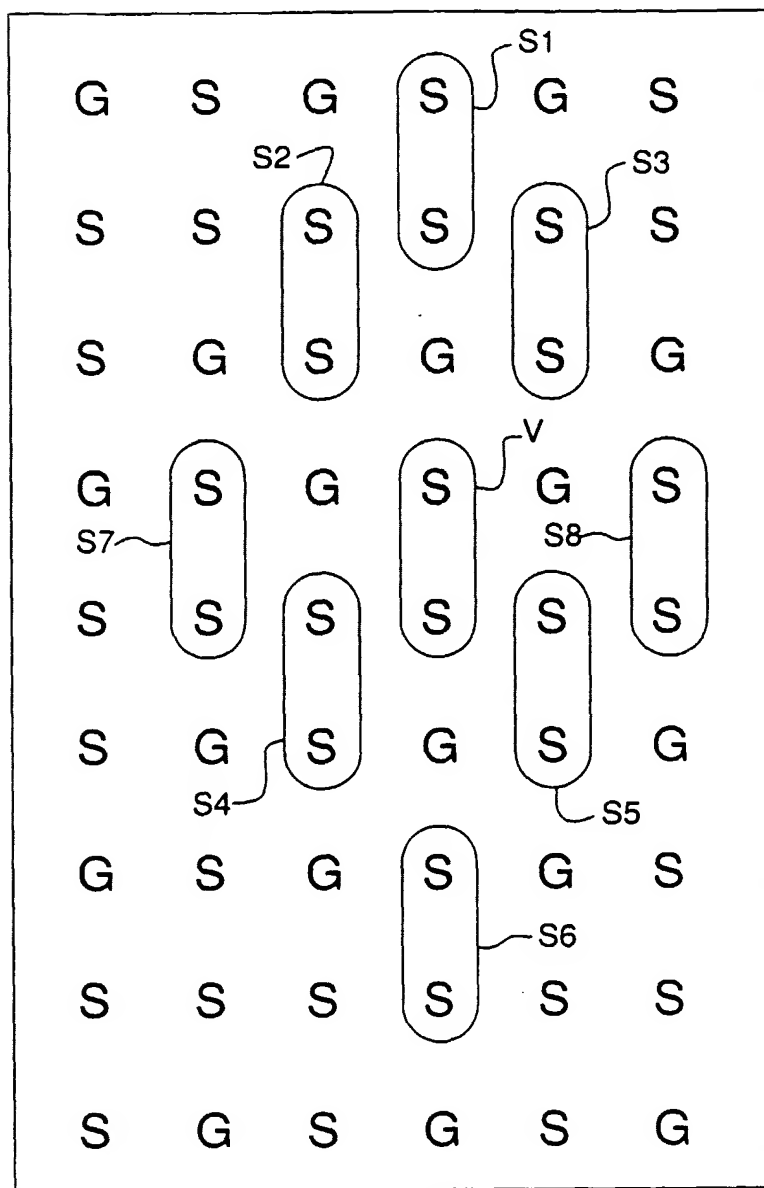


FIG. 3C

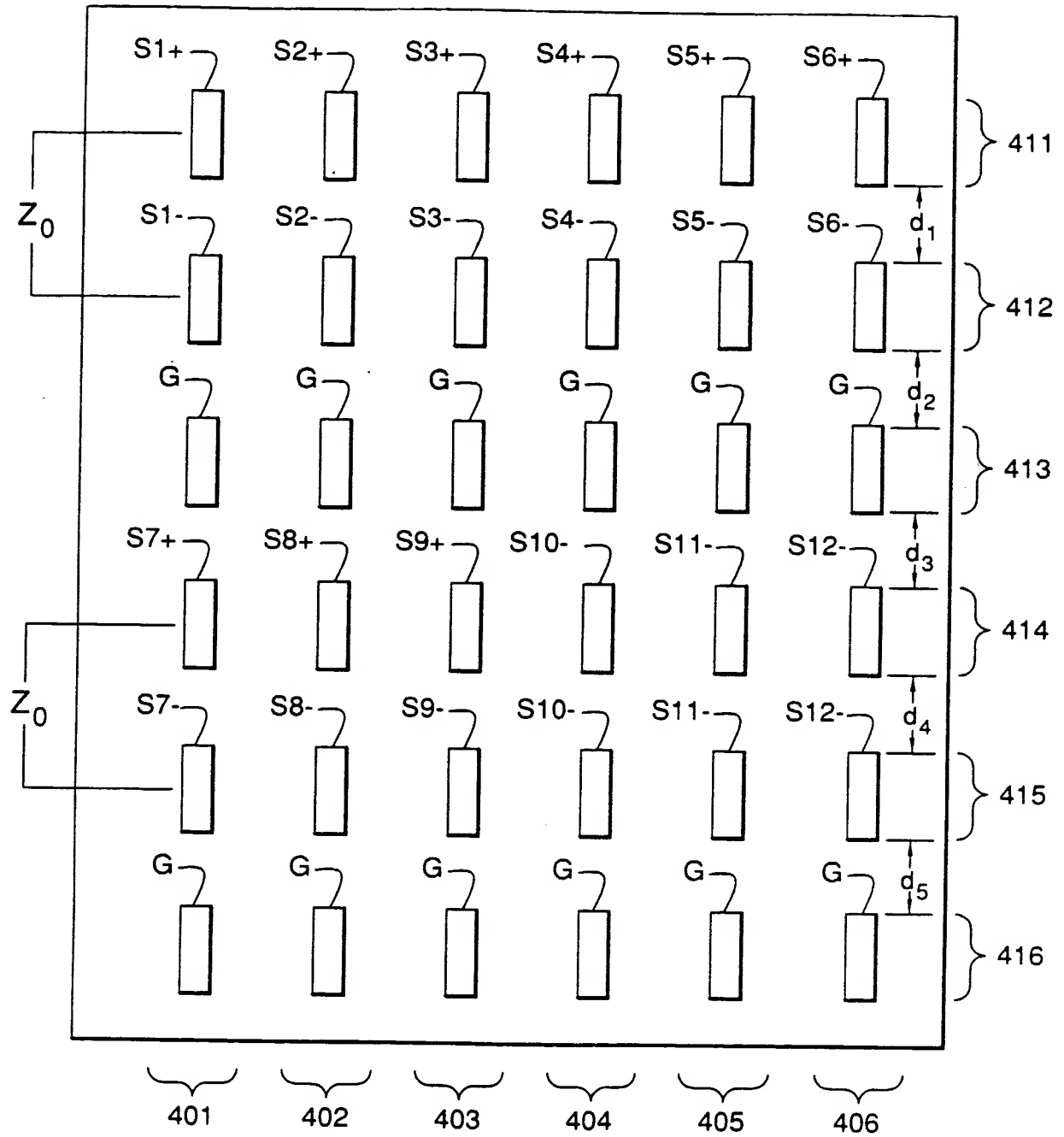


FIG. 4A

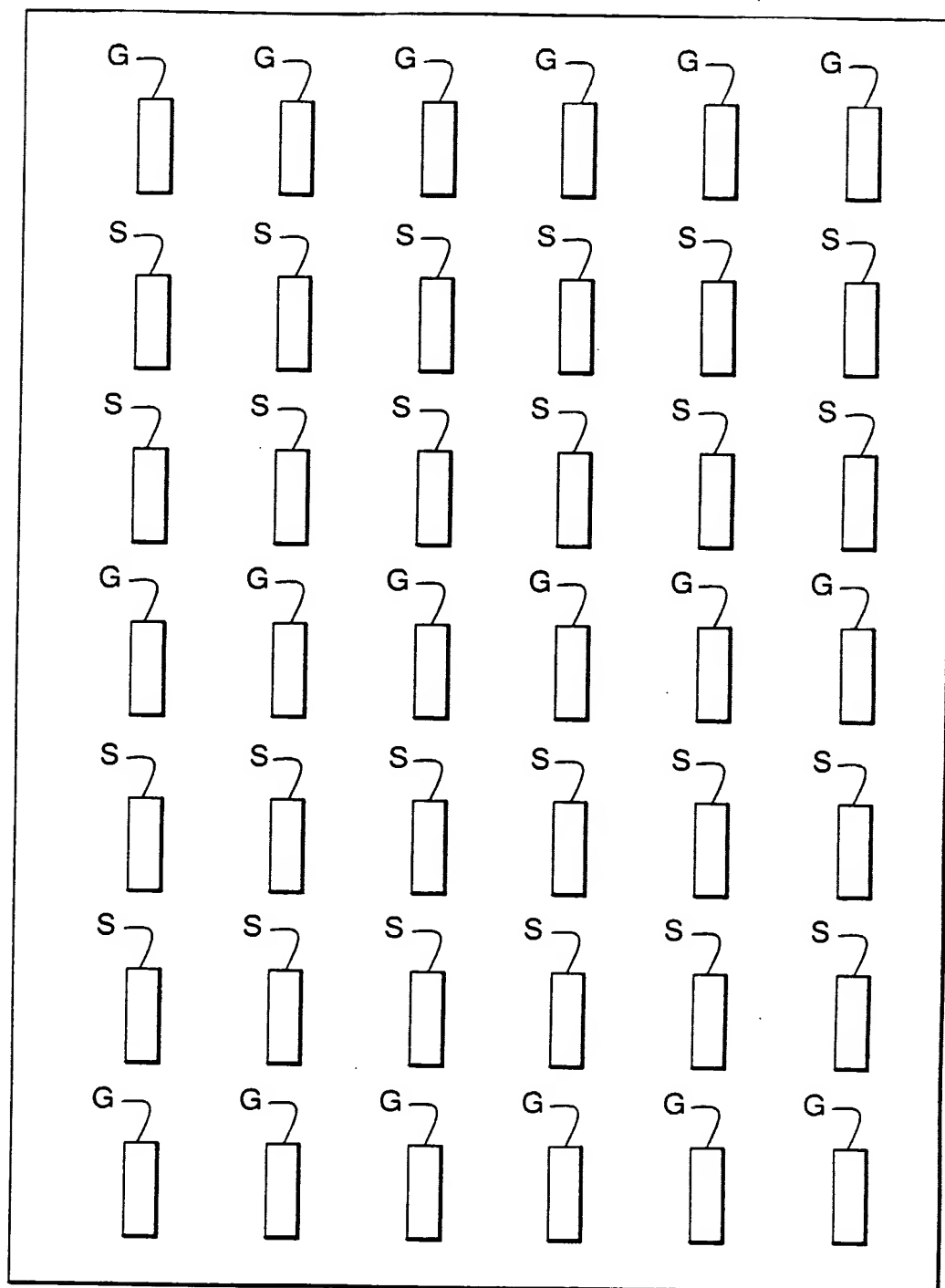


FIG. 4B

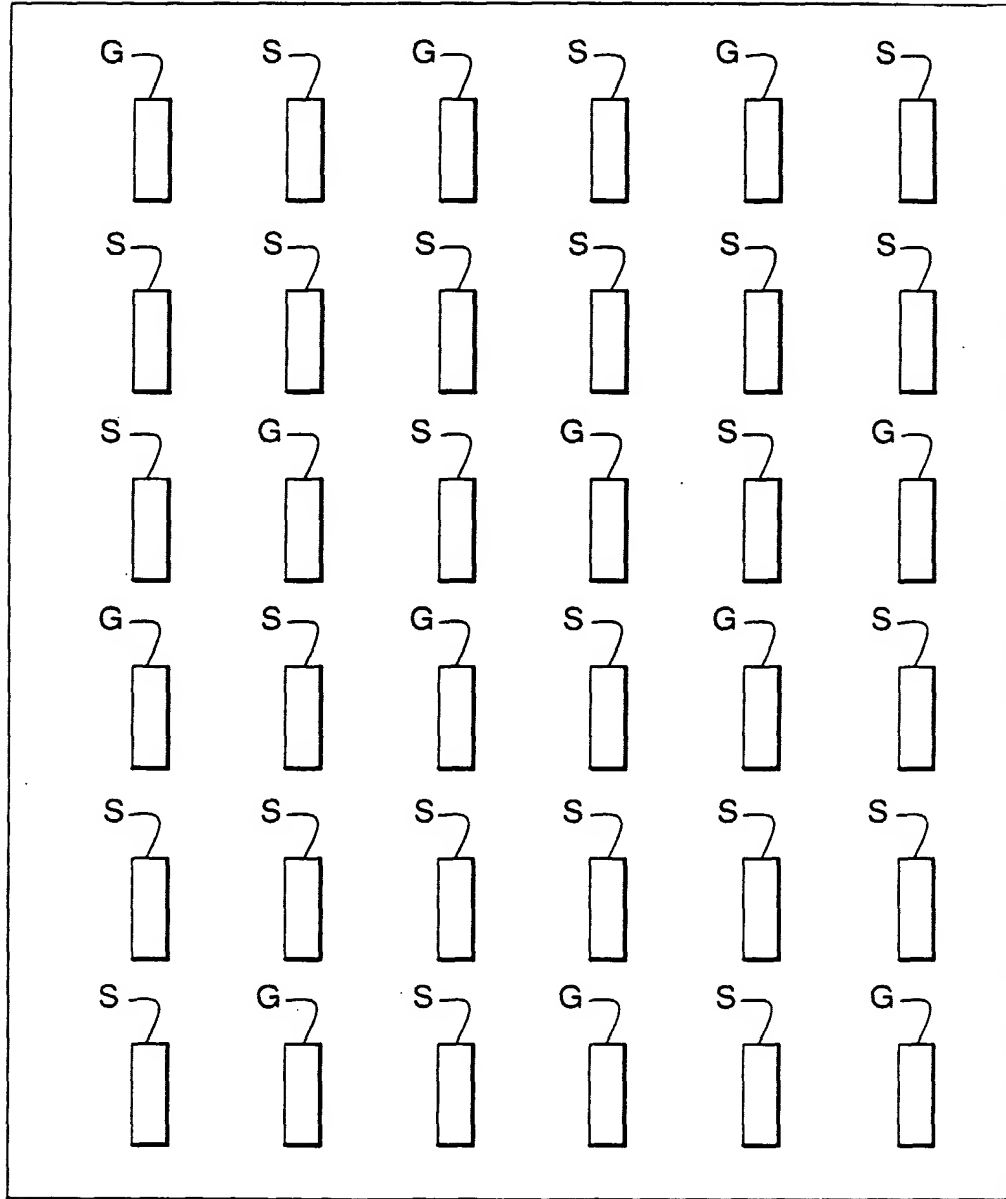


FIG. 4C

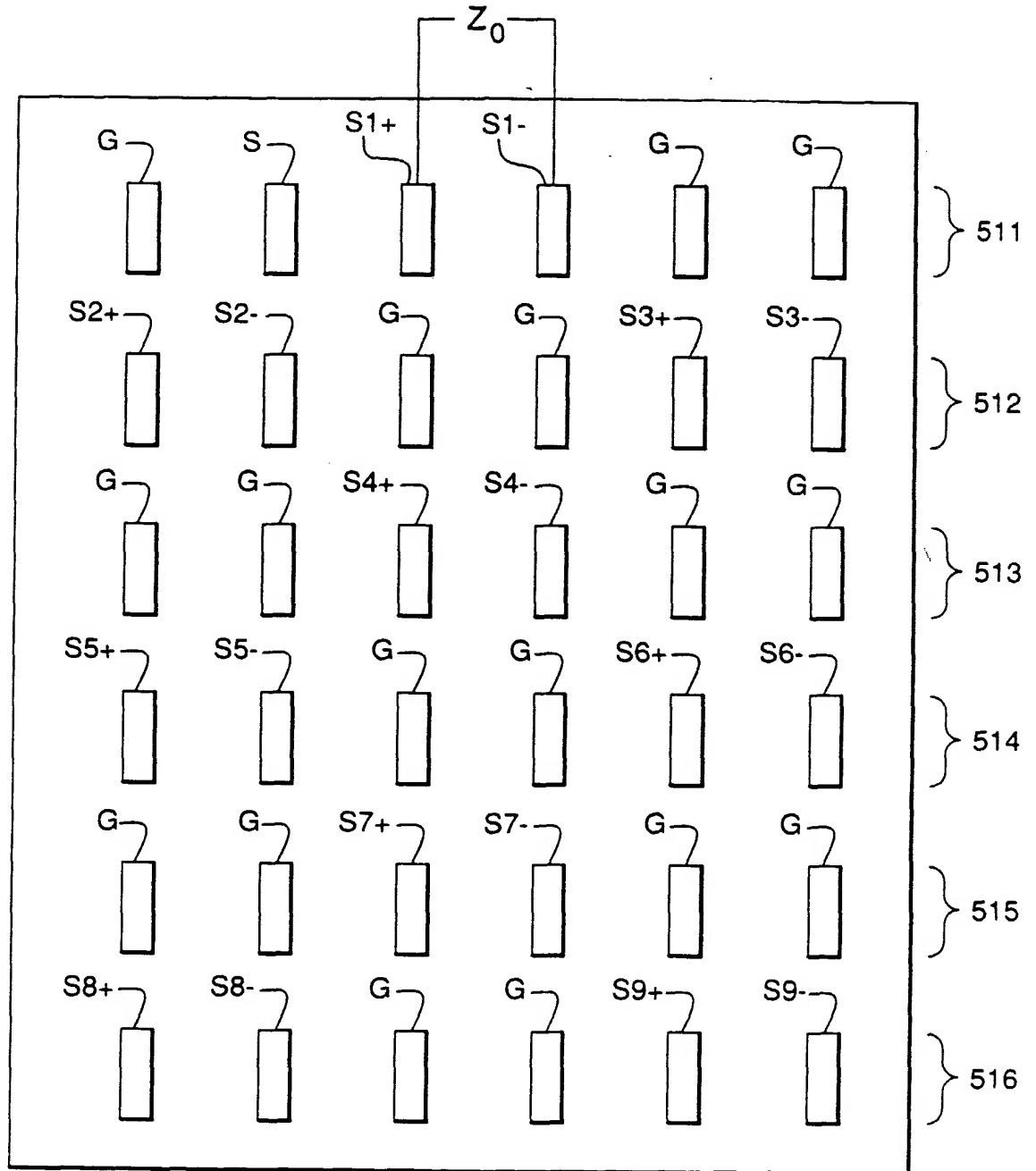


FIG. 5

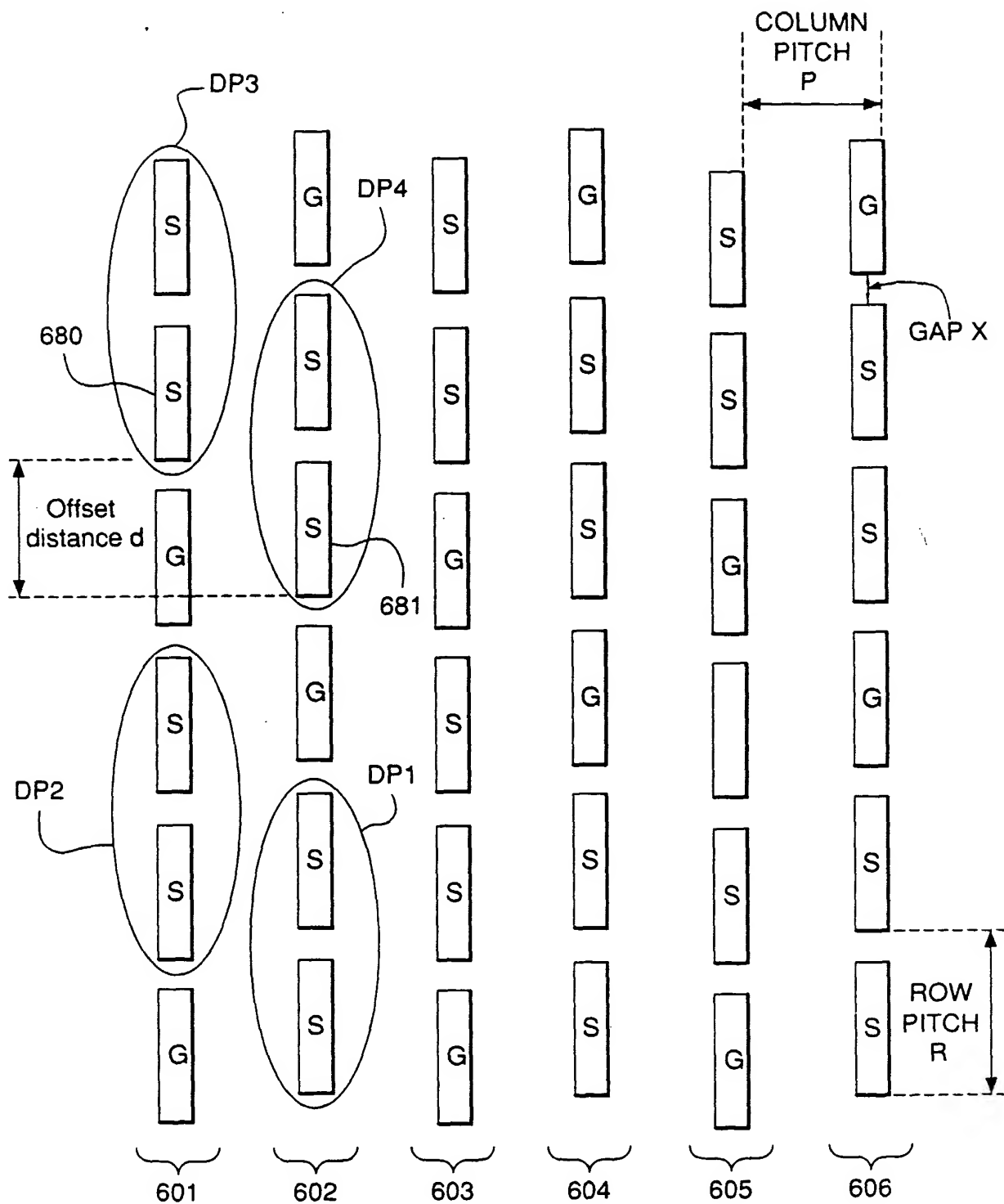


FIG. 6

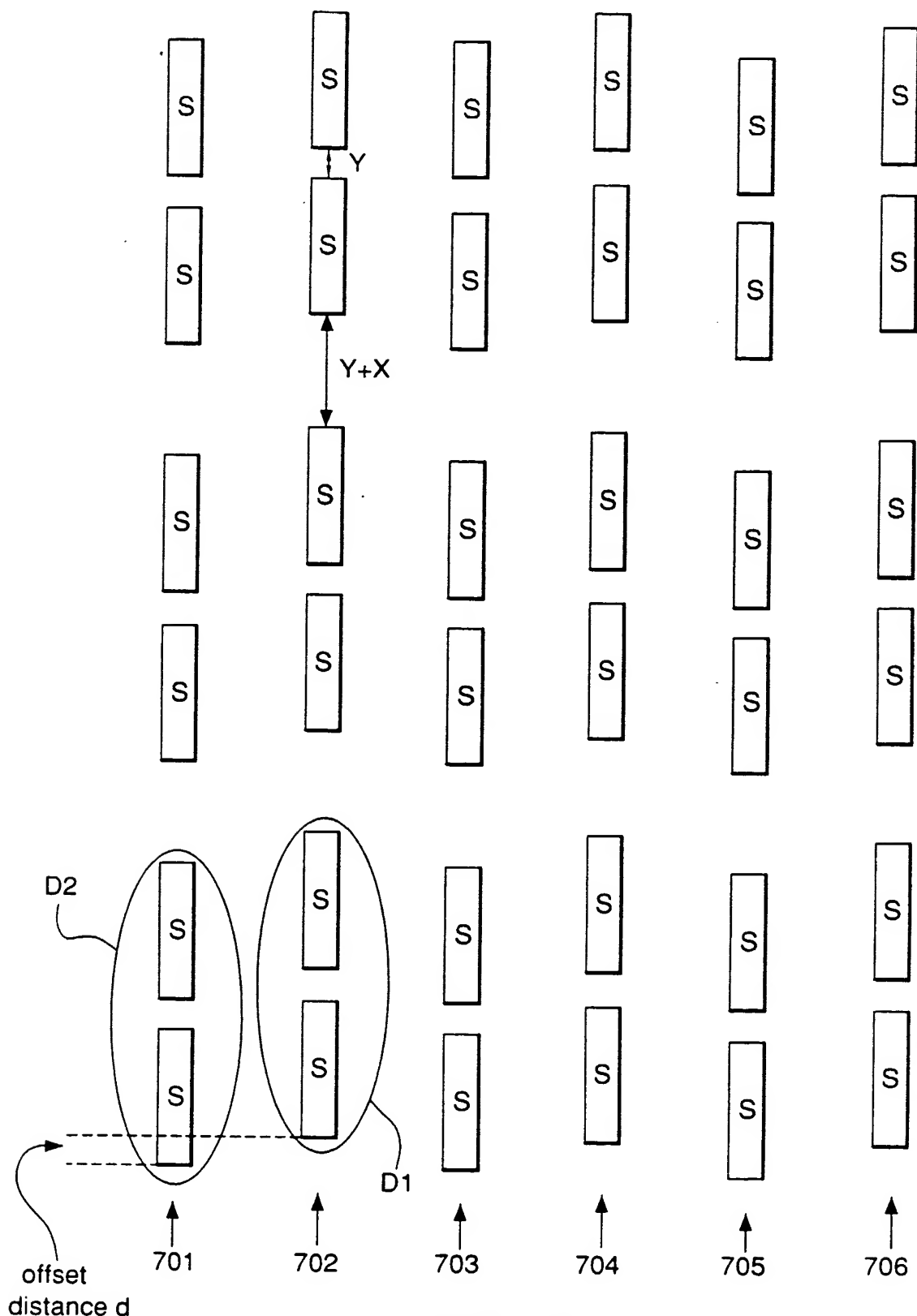


FIG. 7

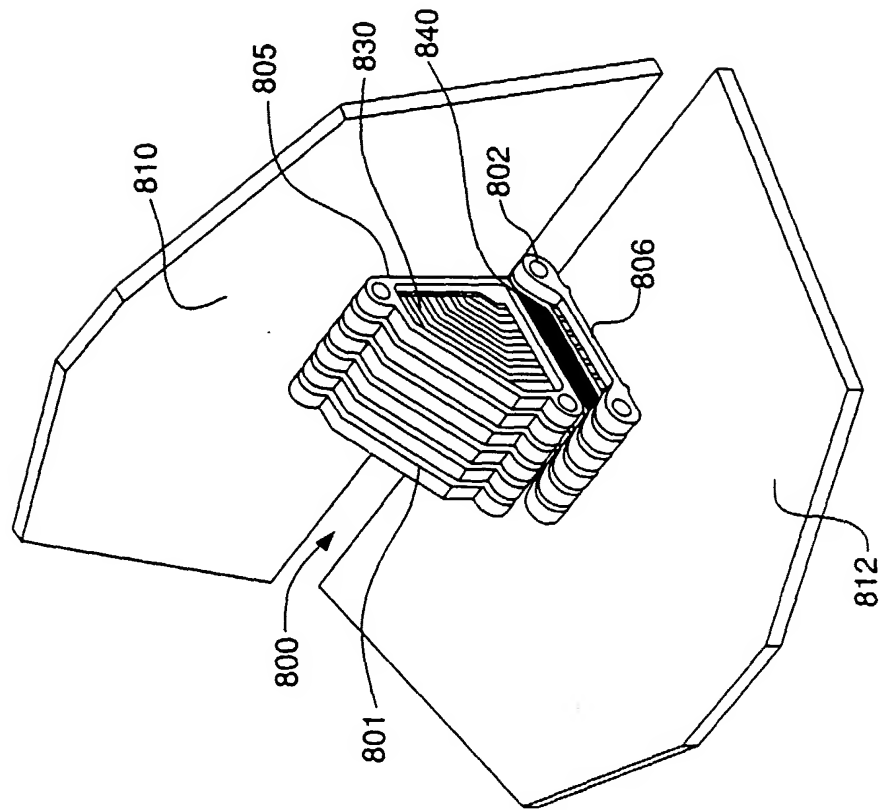


FIG. 8

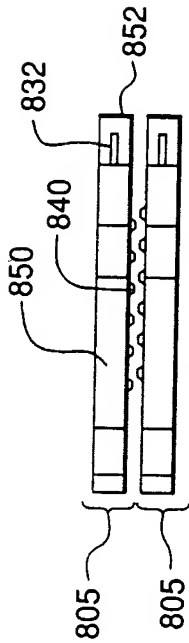


FIG. 11

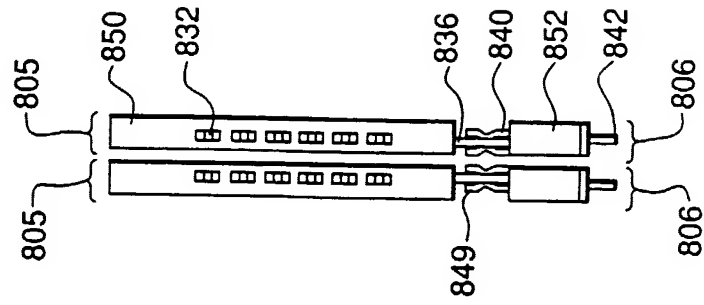


FIG. 10

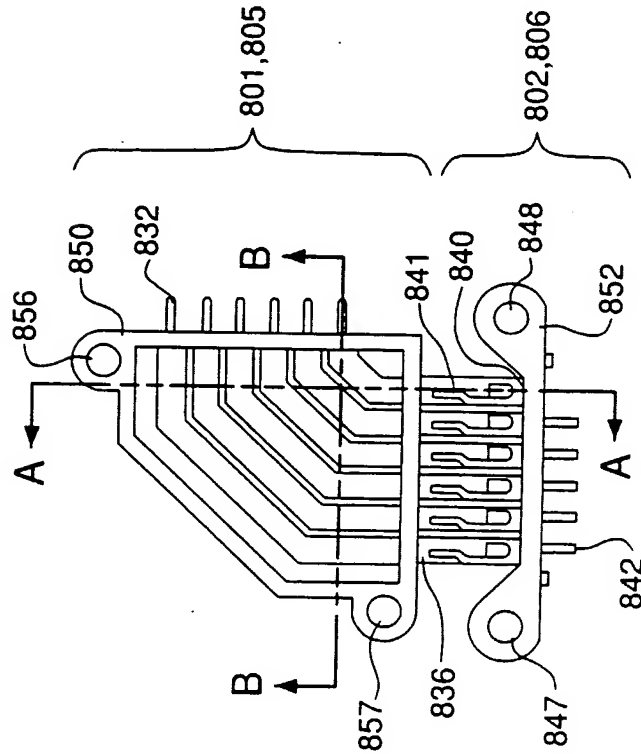
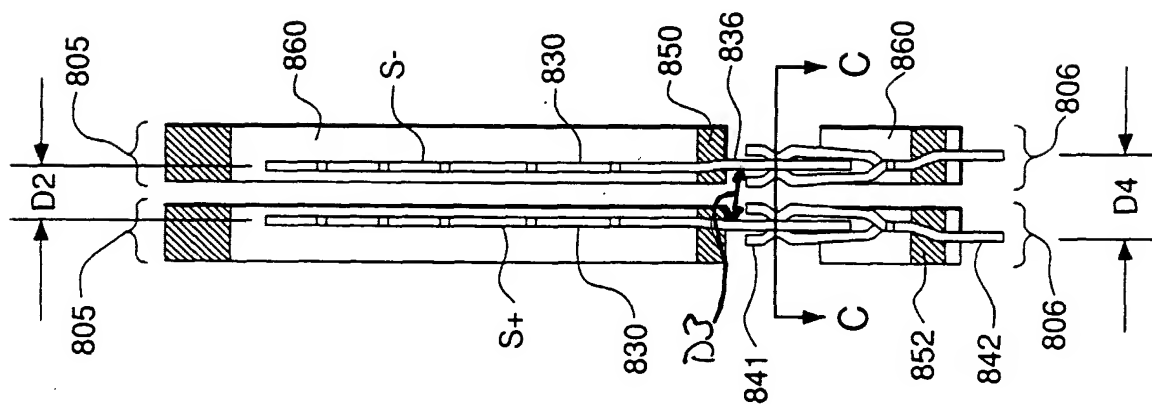
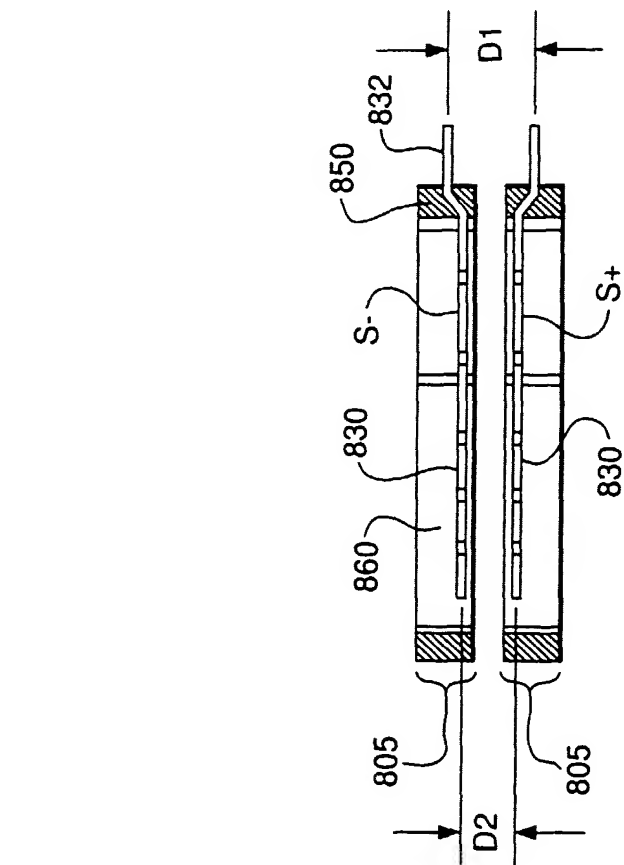


FIG. 9



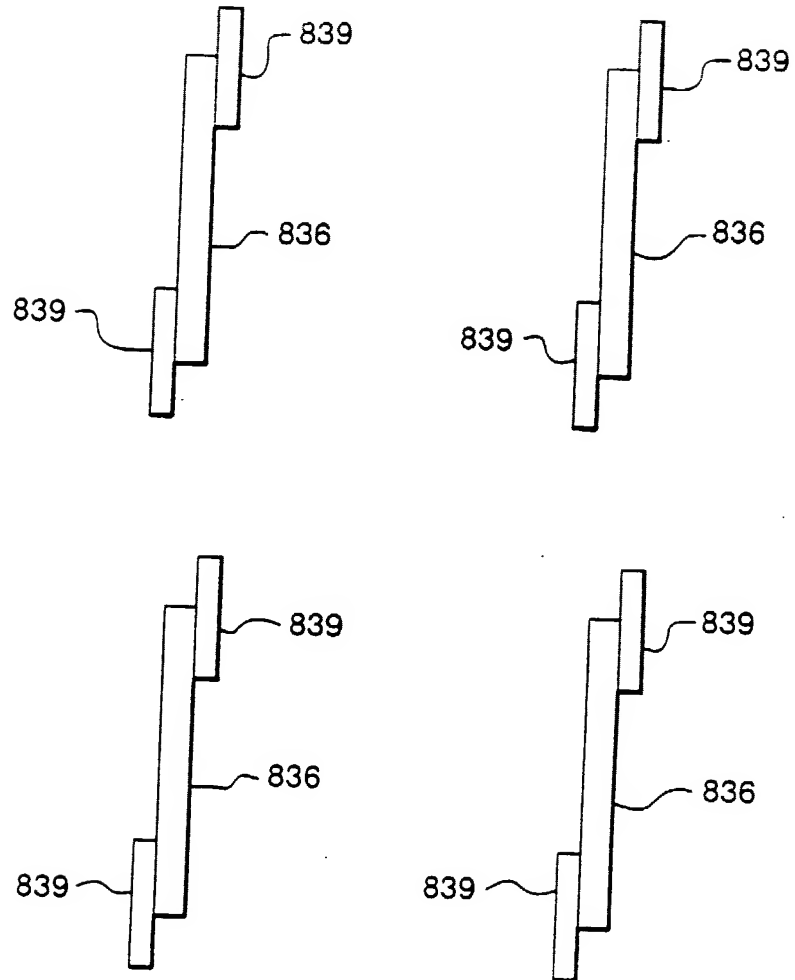


FIG. 13 B

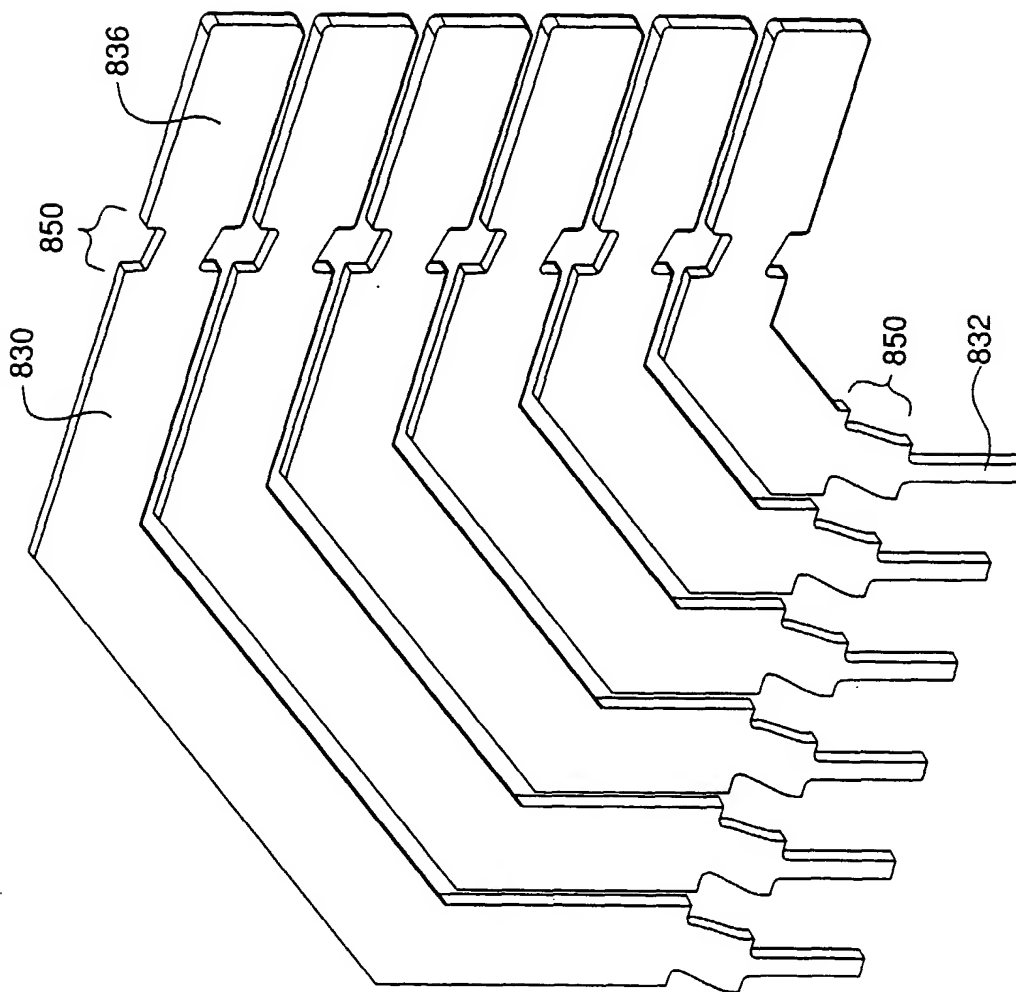


FIG. 14

840

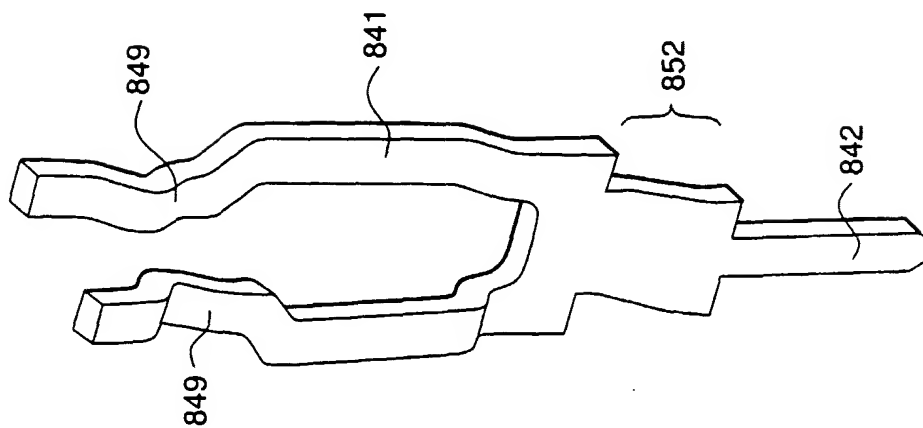


FIG. 15

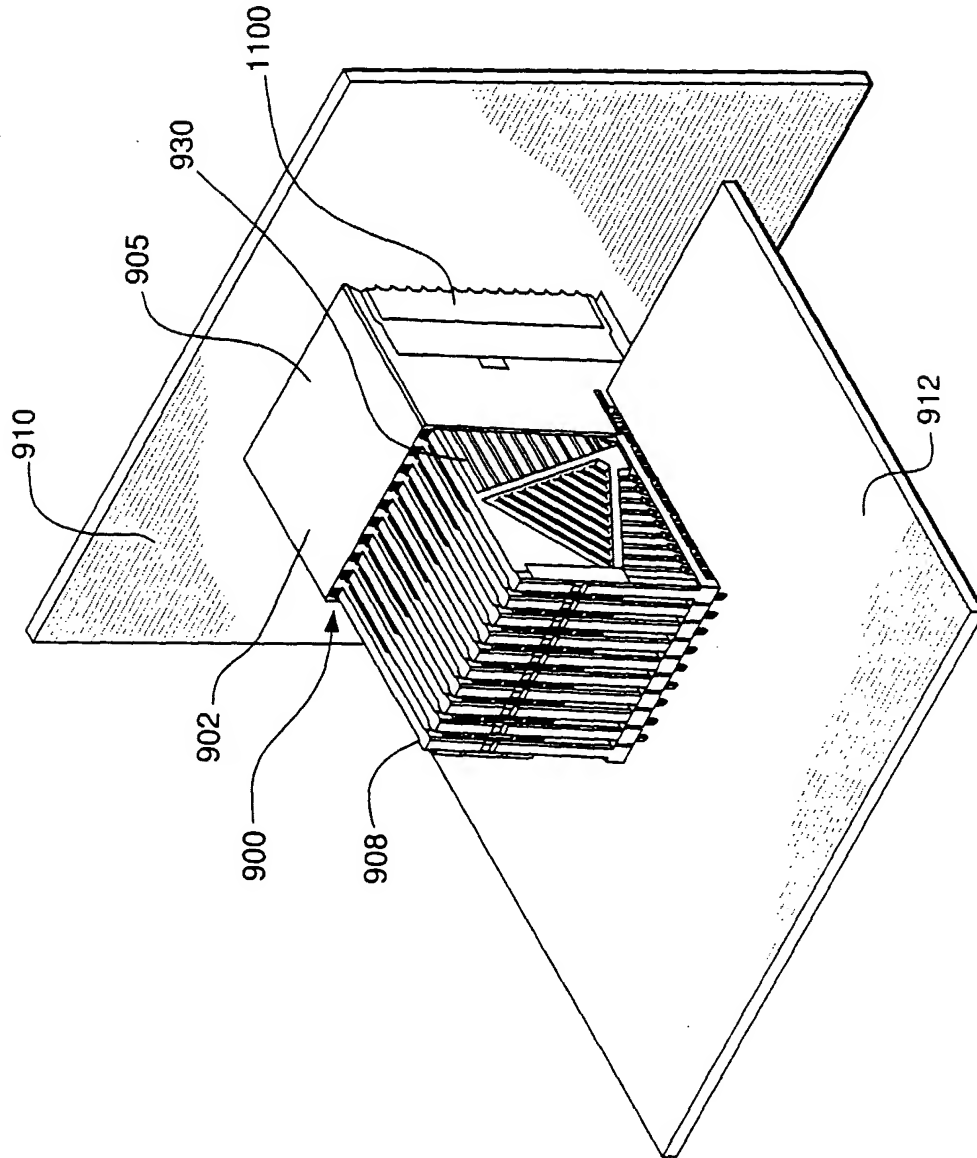


FIG. 16A

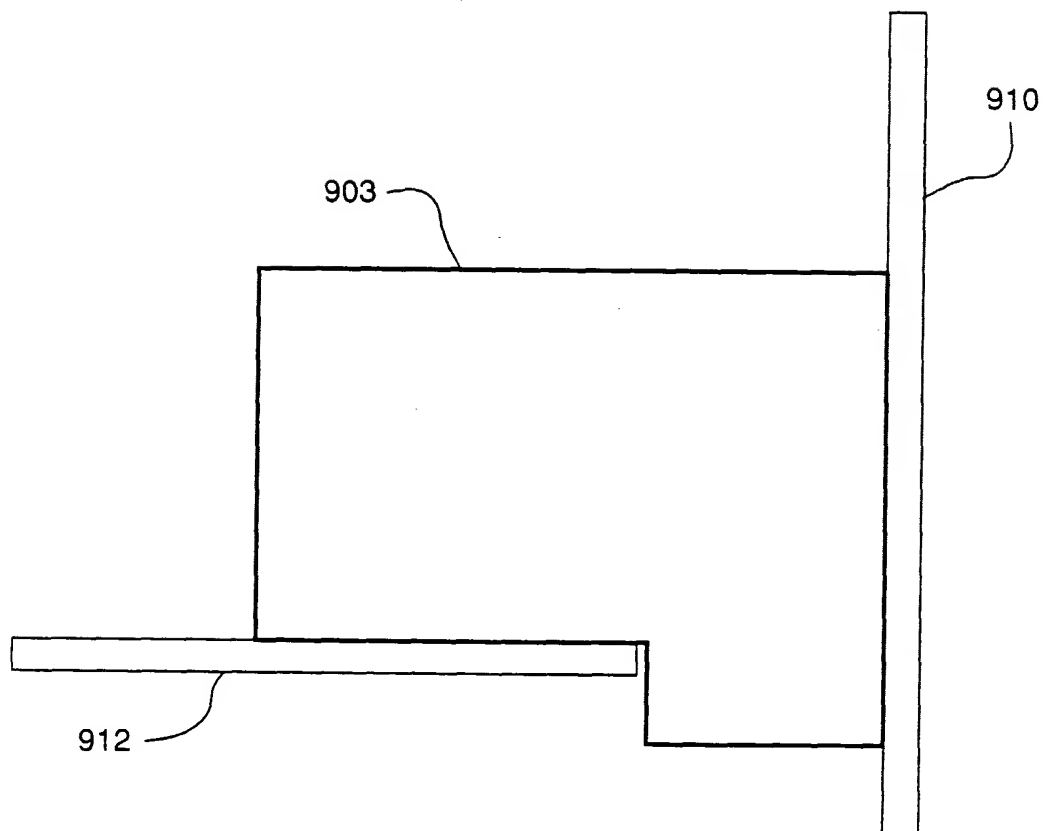


FIG. 16B

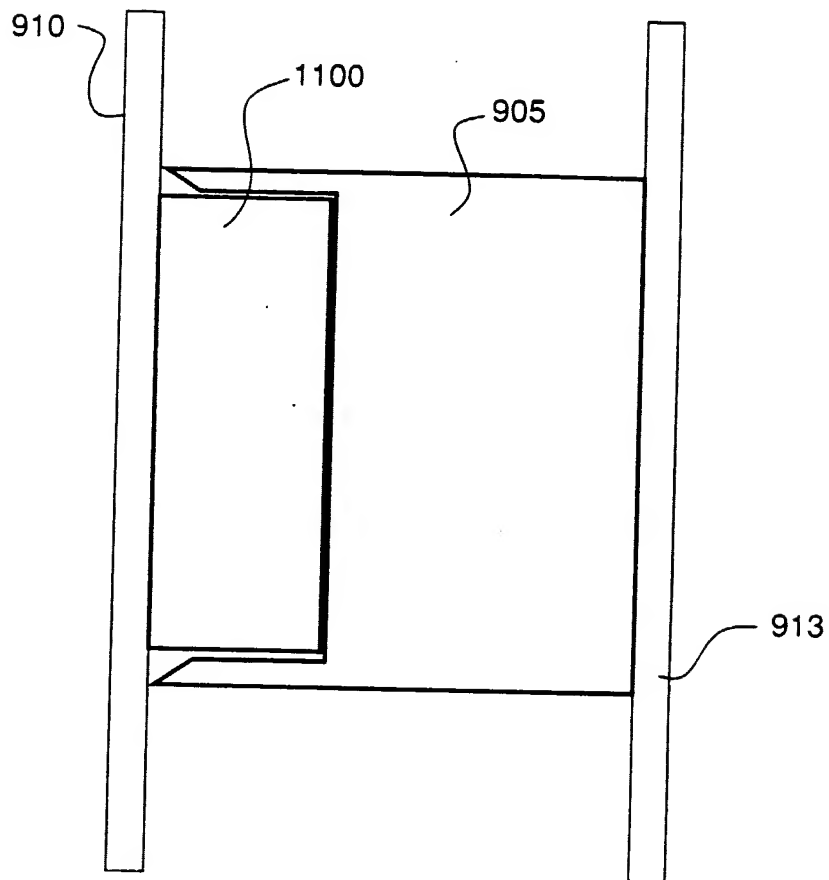


FIG. 16C

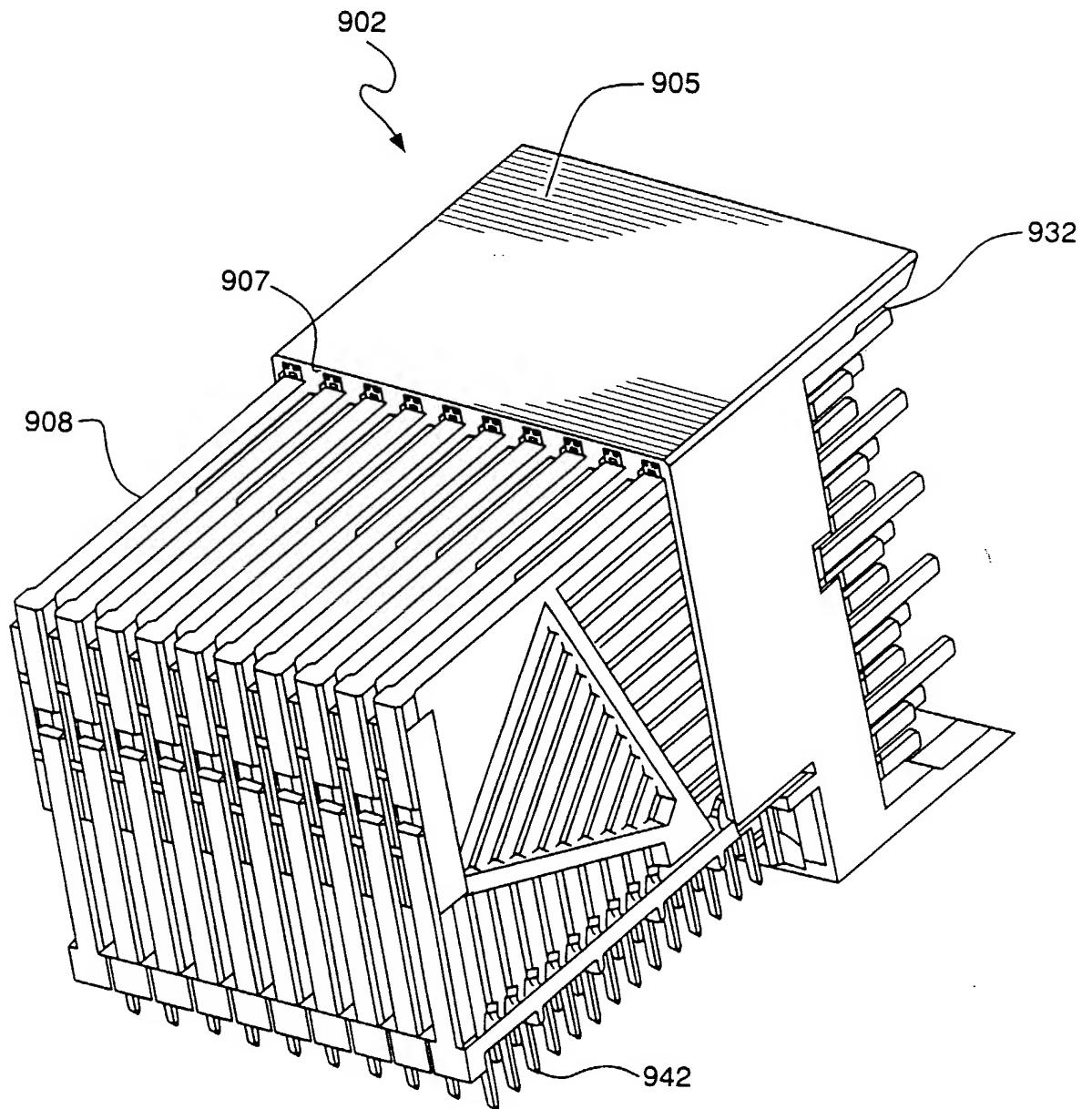


FIG. 17

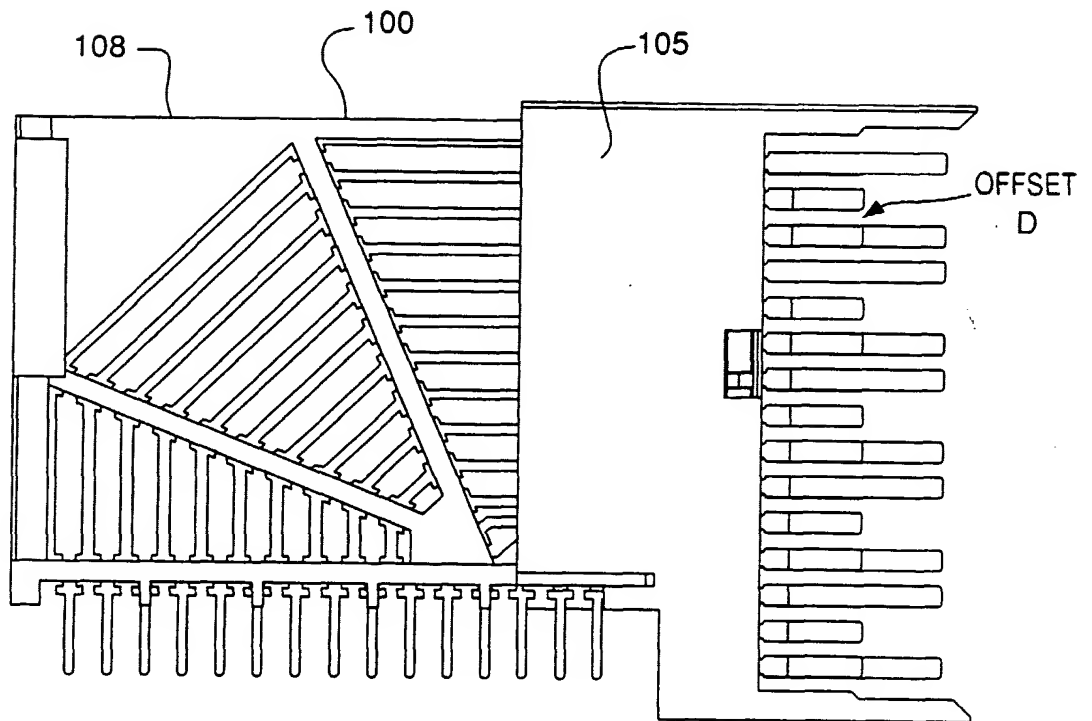


FIG. 18

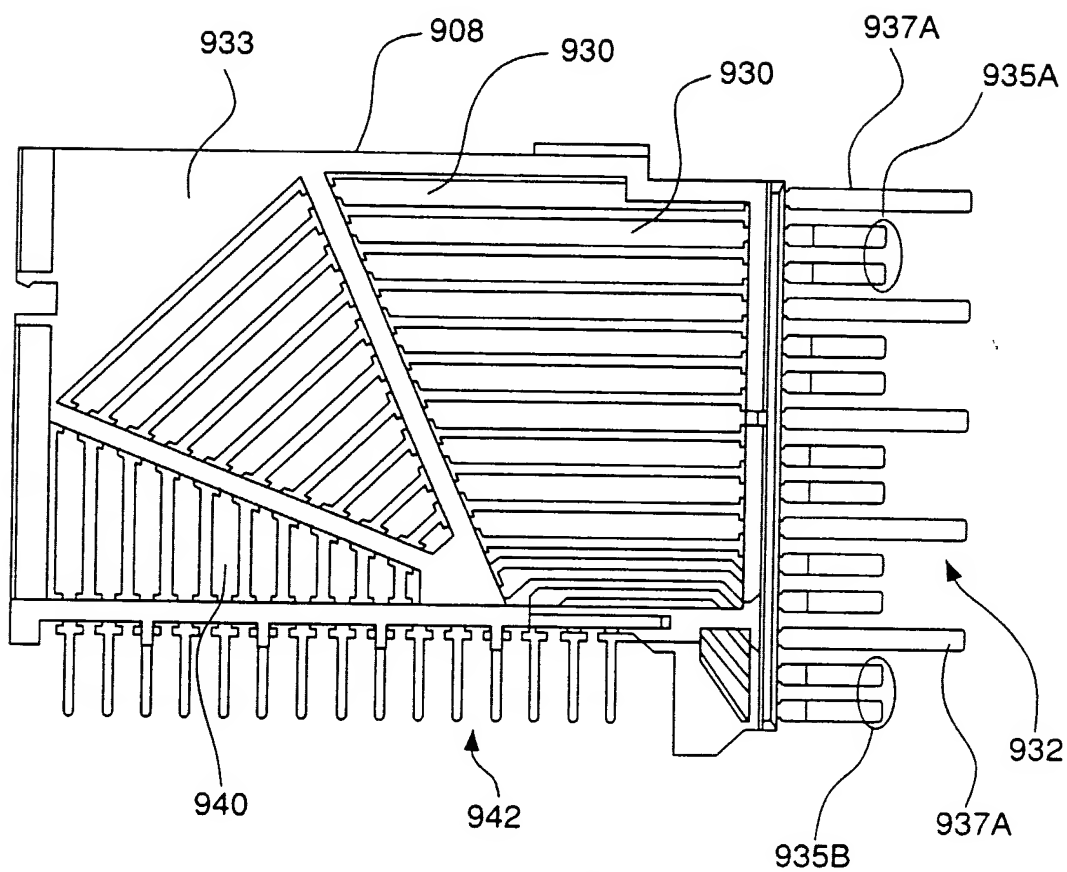


FIG. 19 *A*

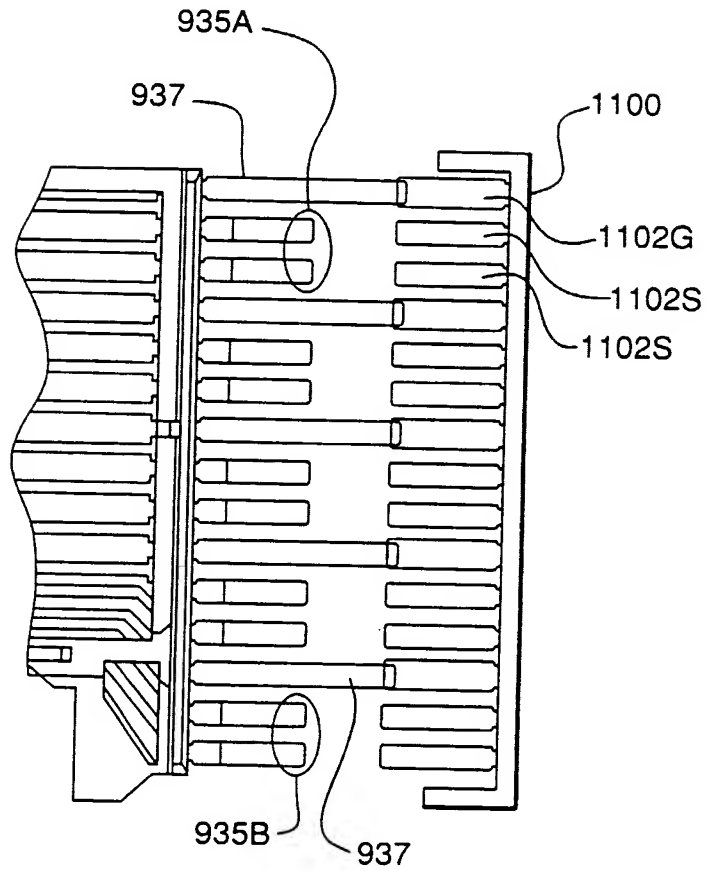


FIG. 19B

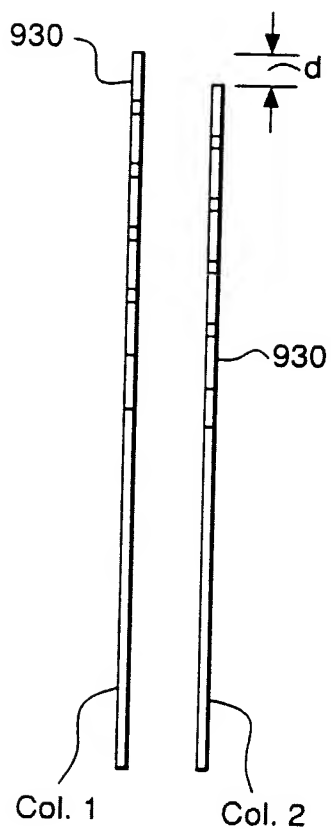


FIG. 20

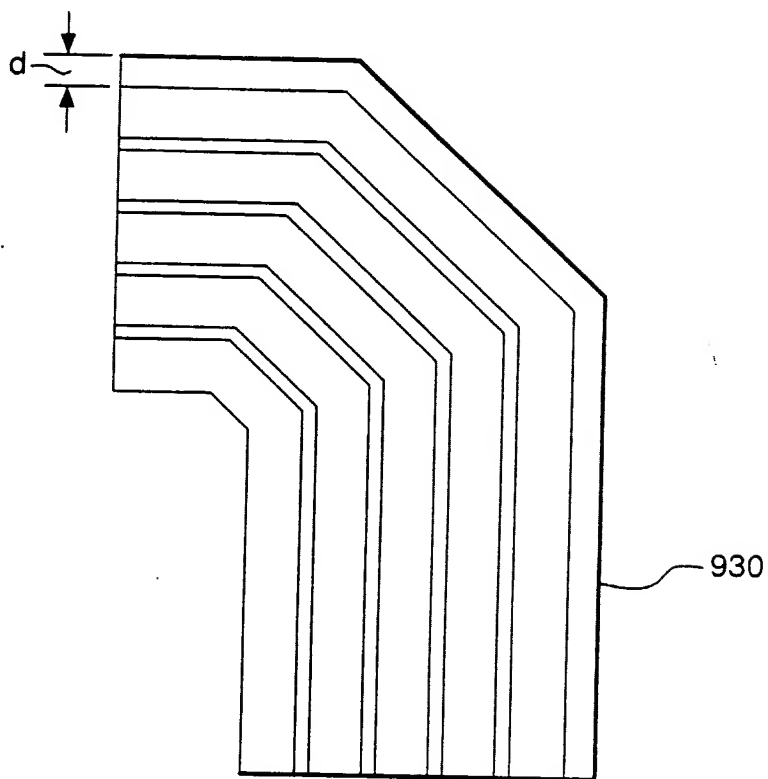


FIG. 21

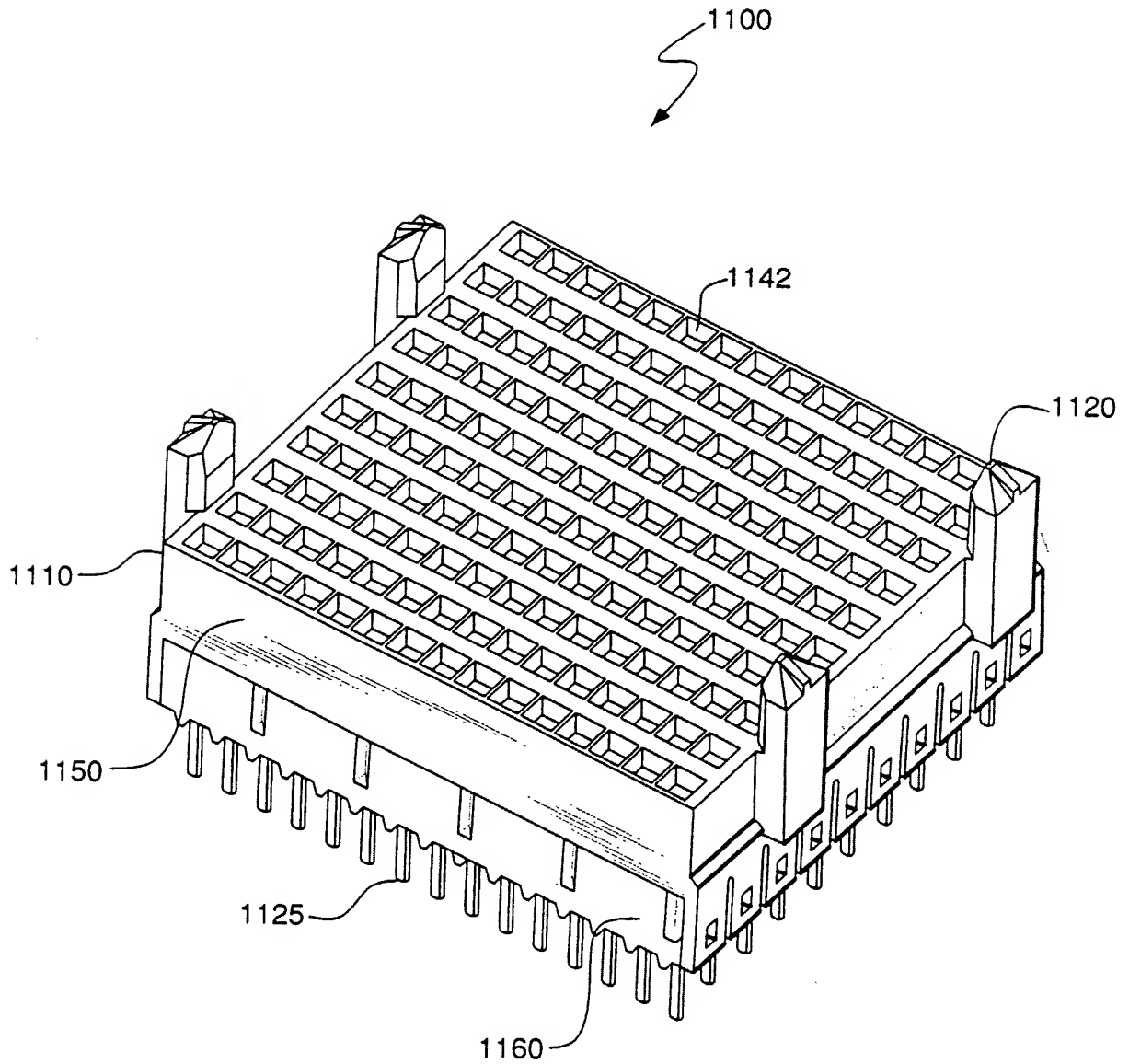


FIG. 22

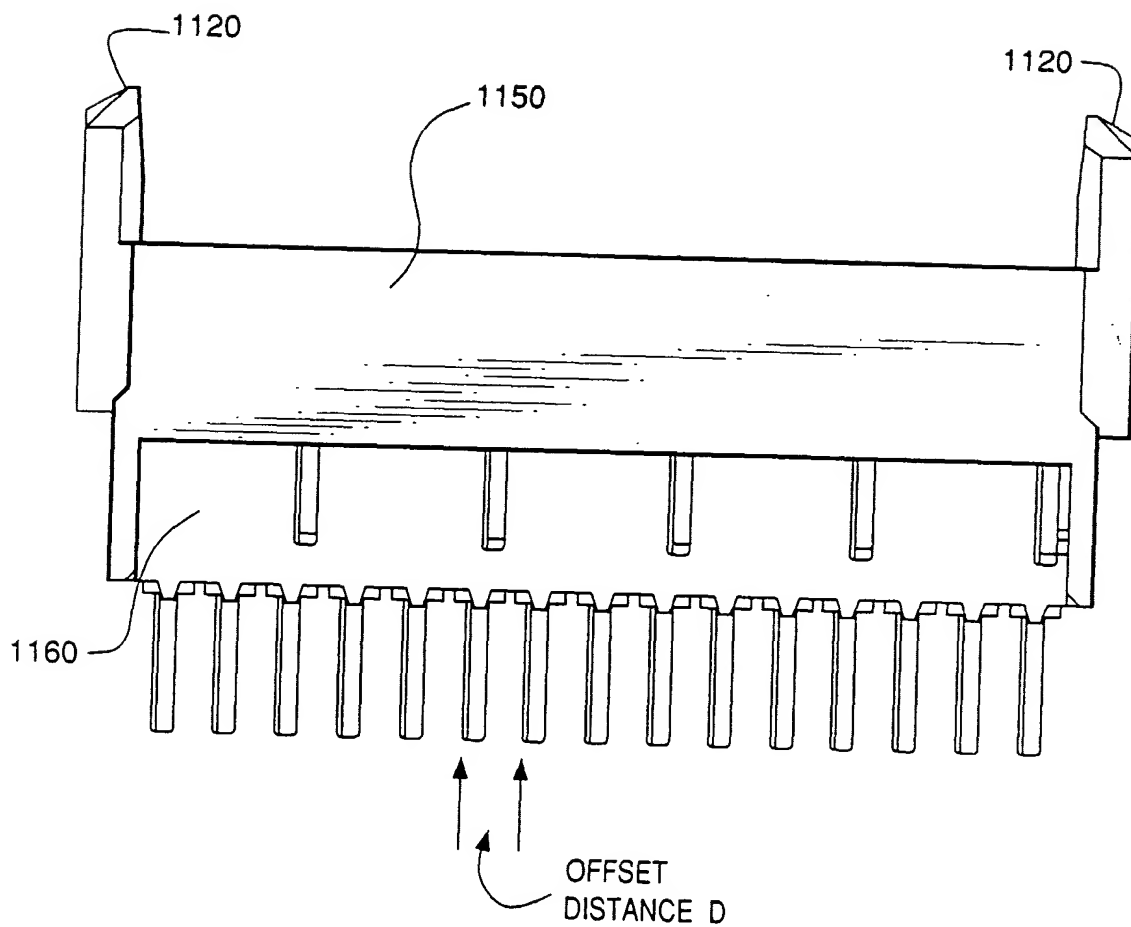


FIG. 23

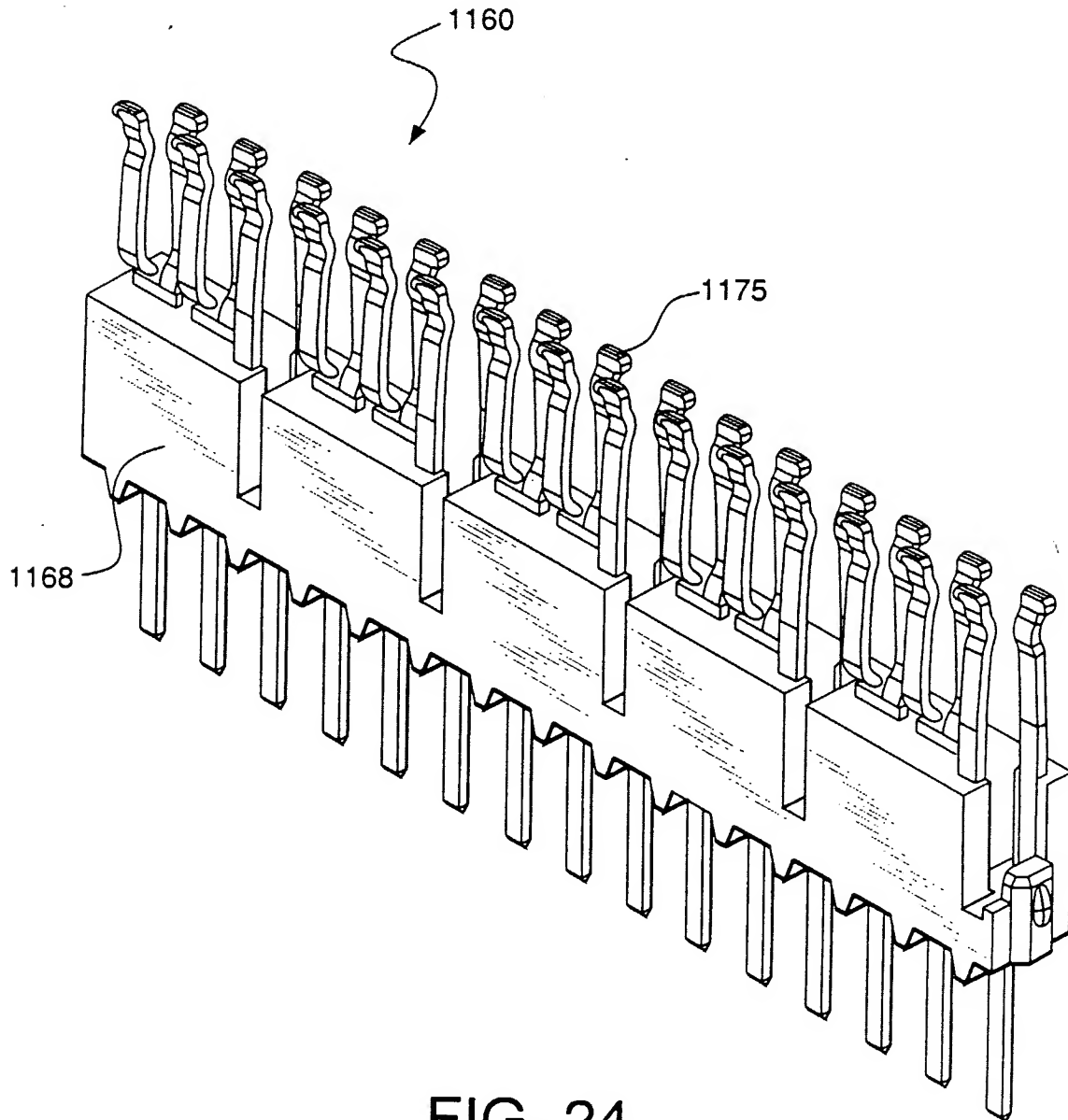


FIG. 24

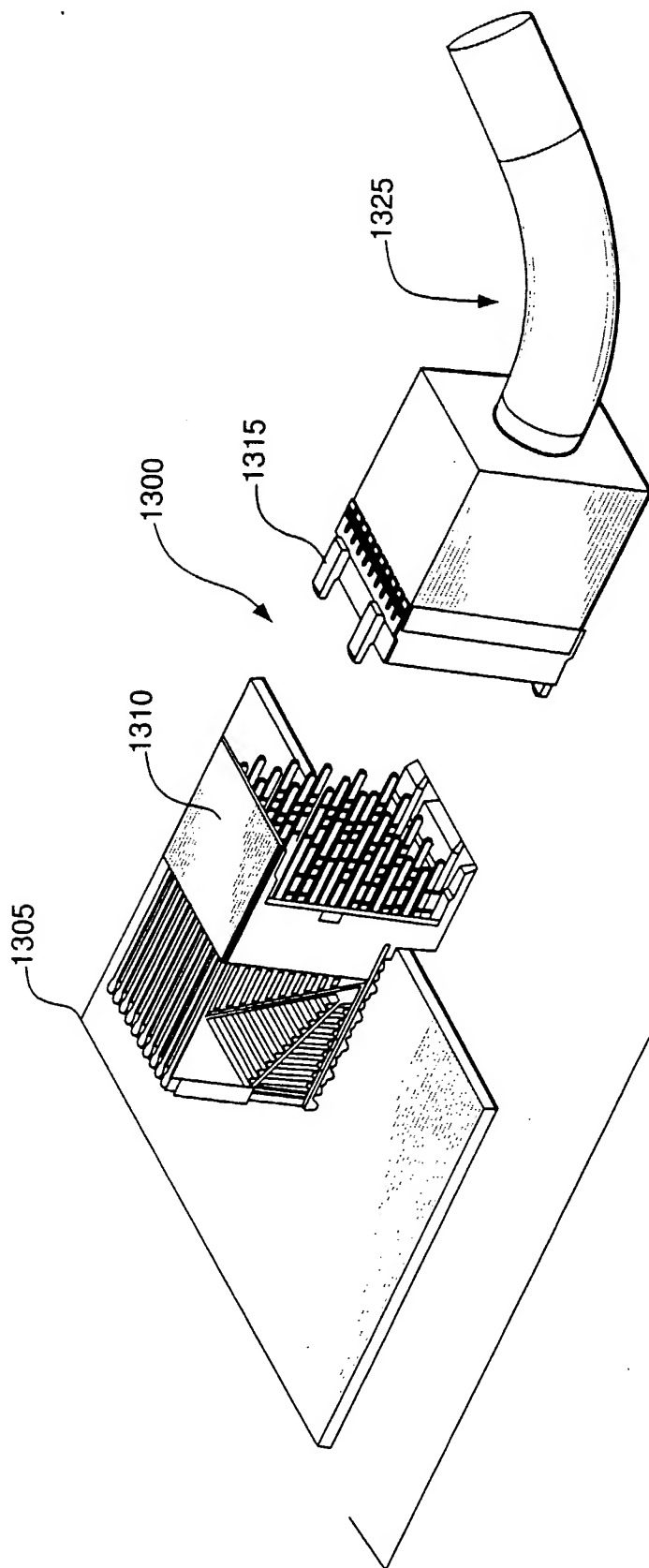


FIG. 25

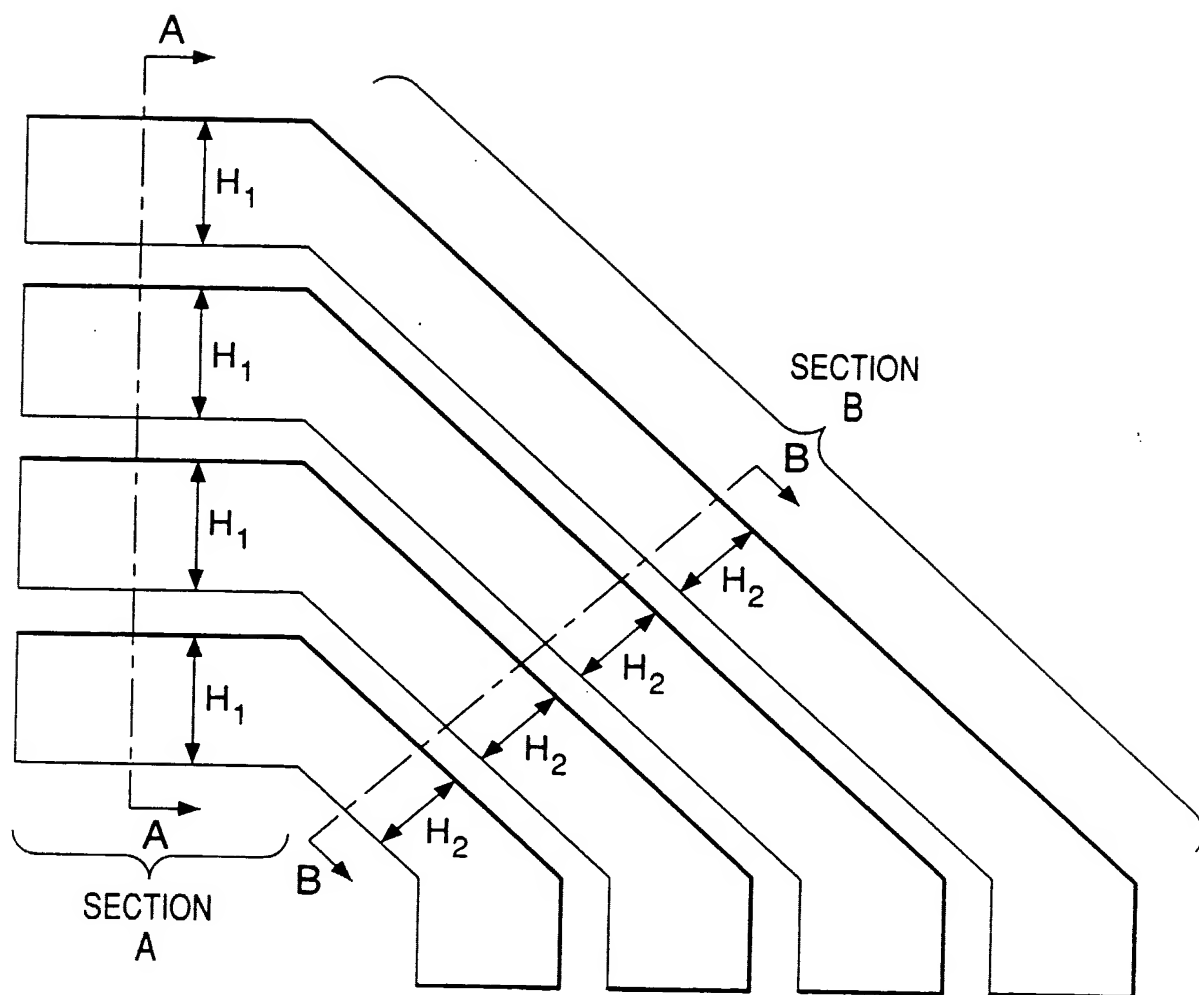
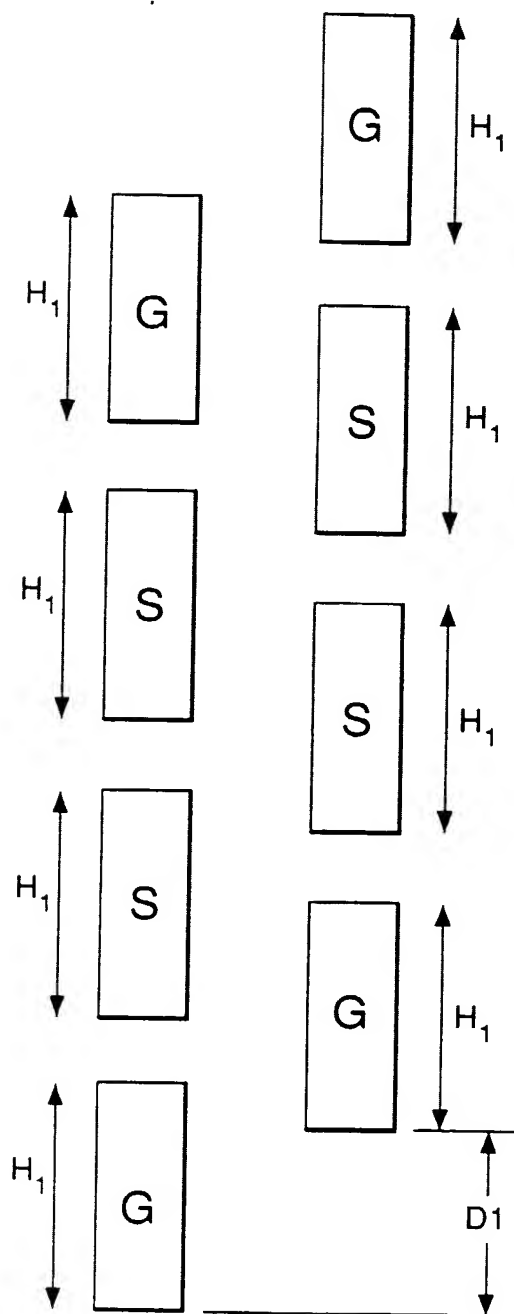
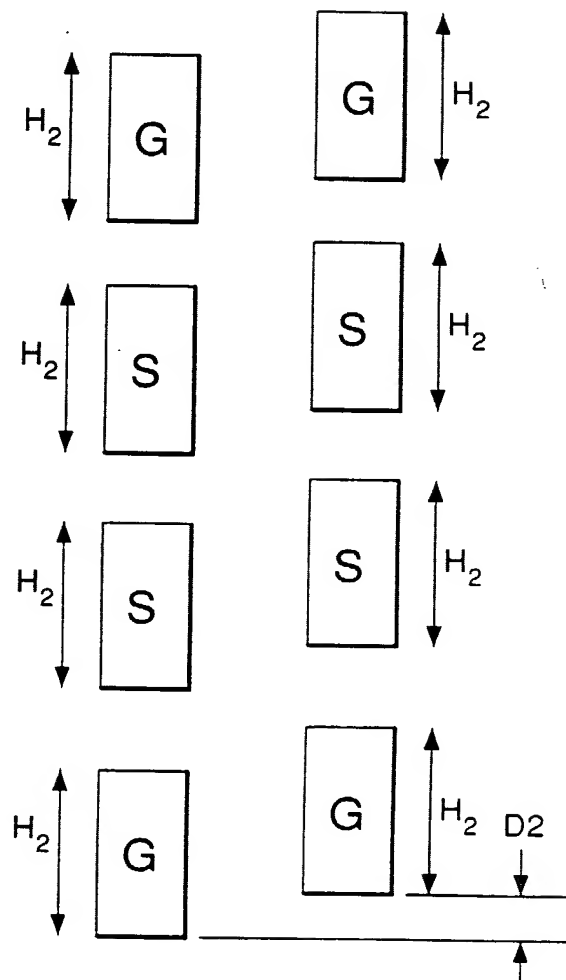


FIG. 26



Section A-A

FIG. 27



Section B-B

FIG. 28

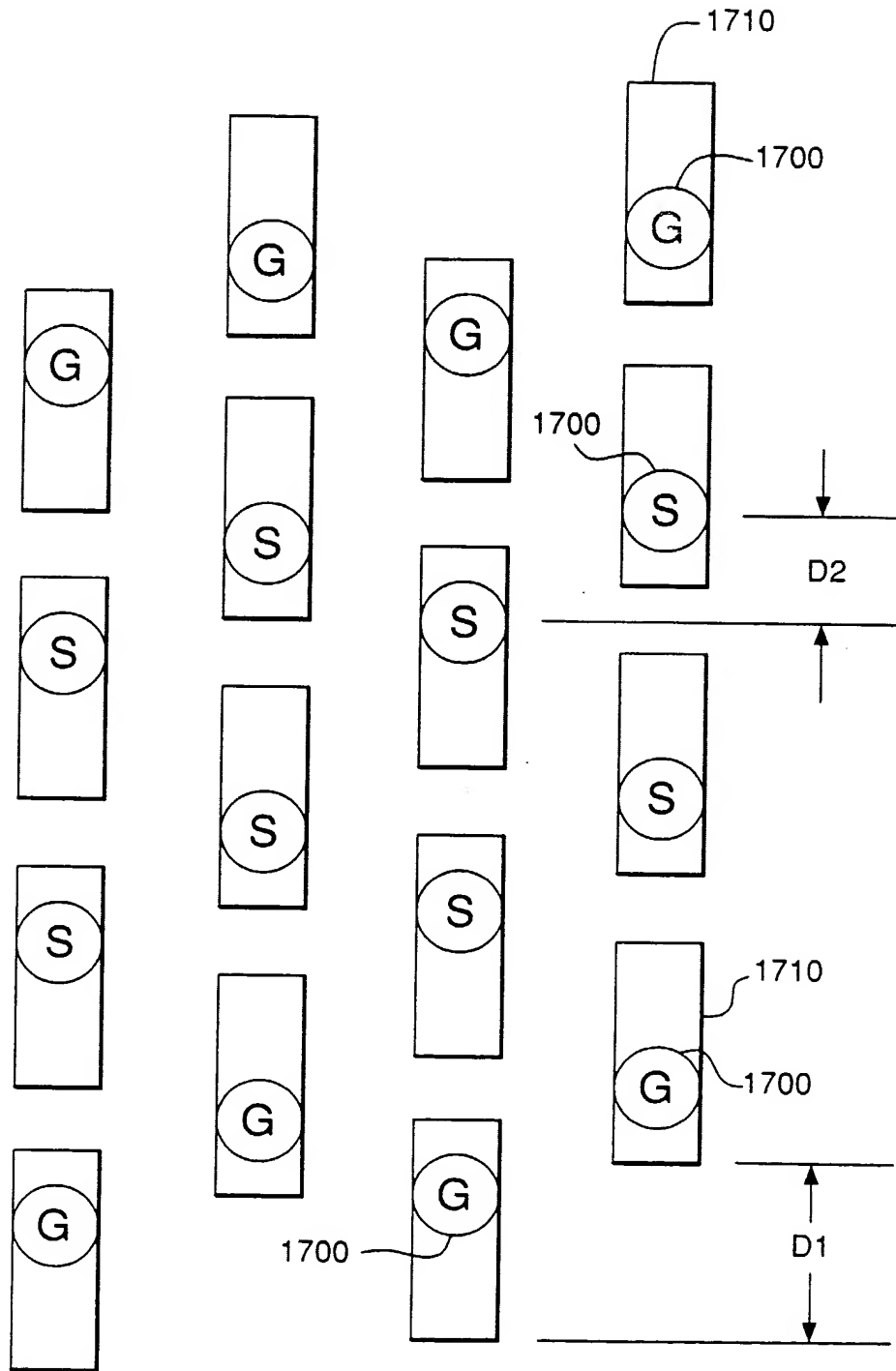


FIG. 29

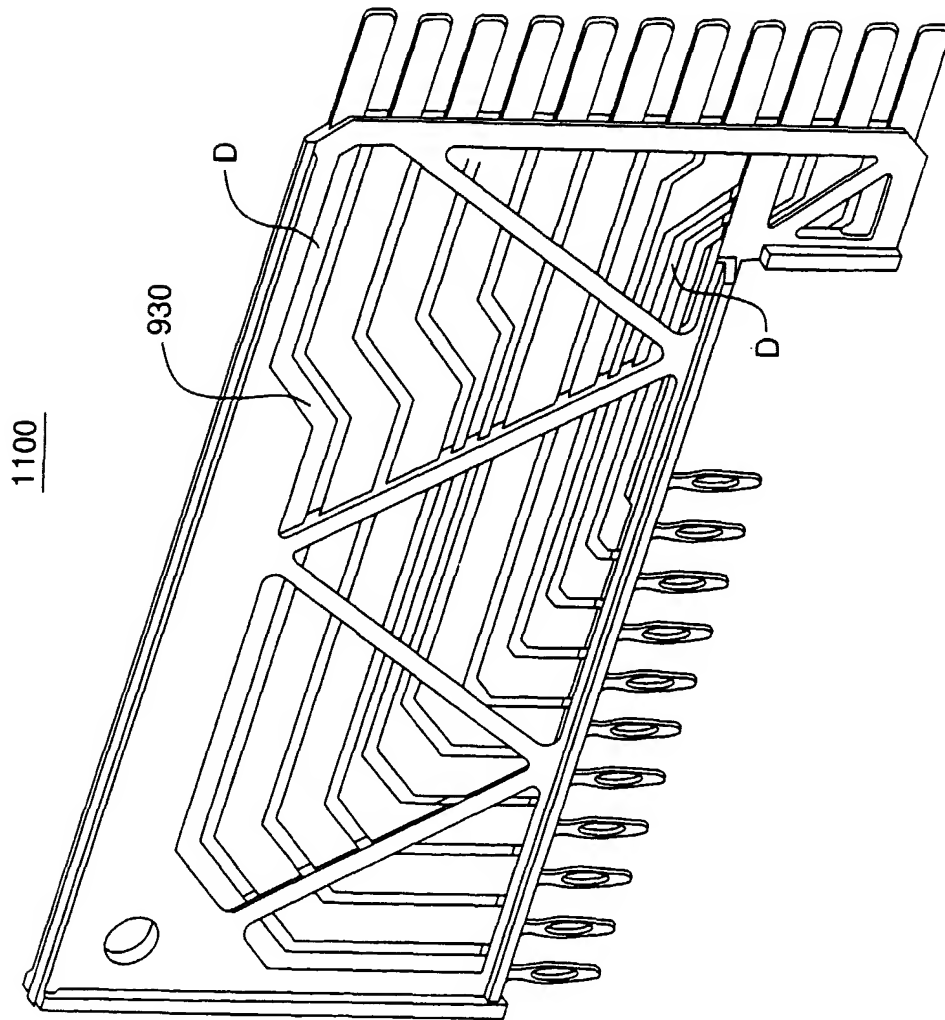


FIG. 30

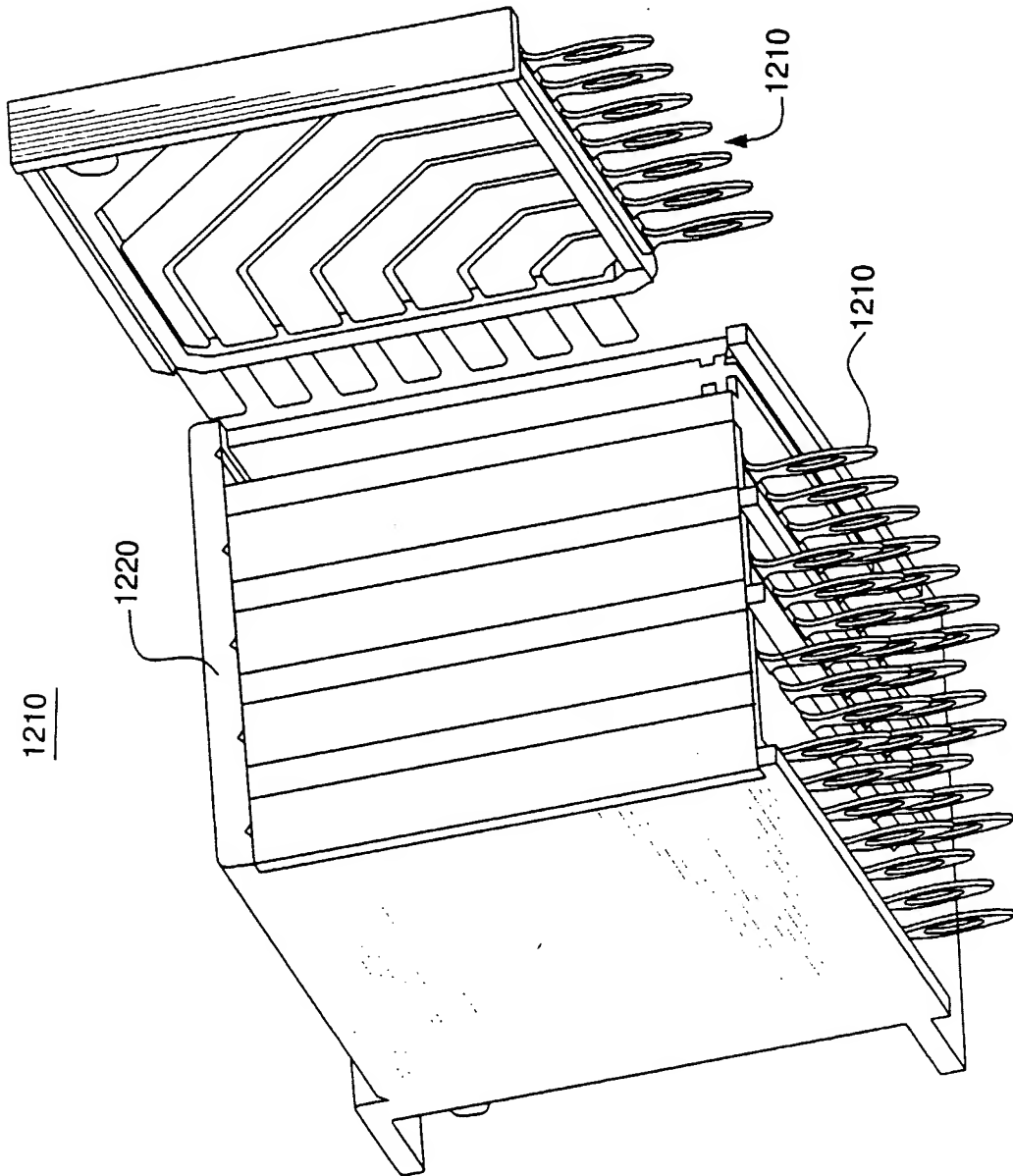


FIG. 31

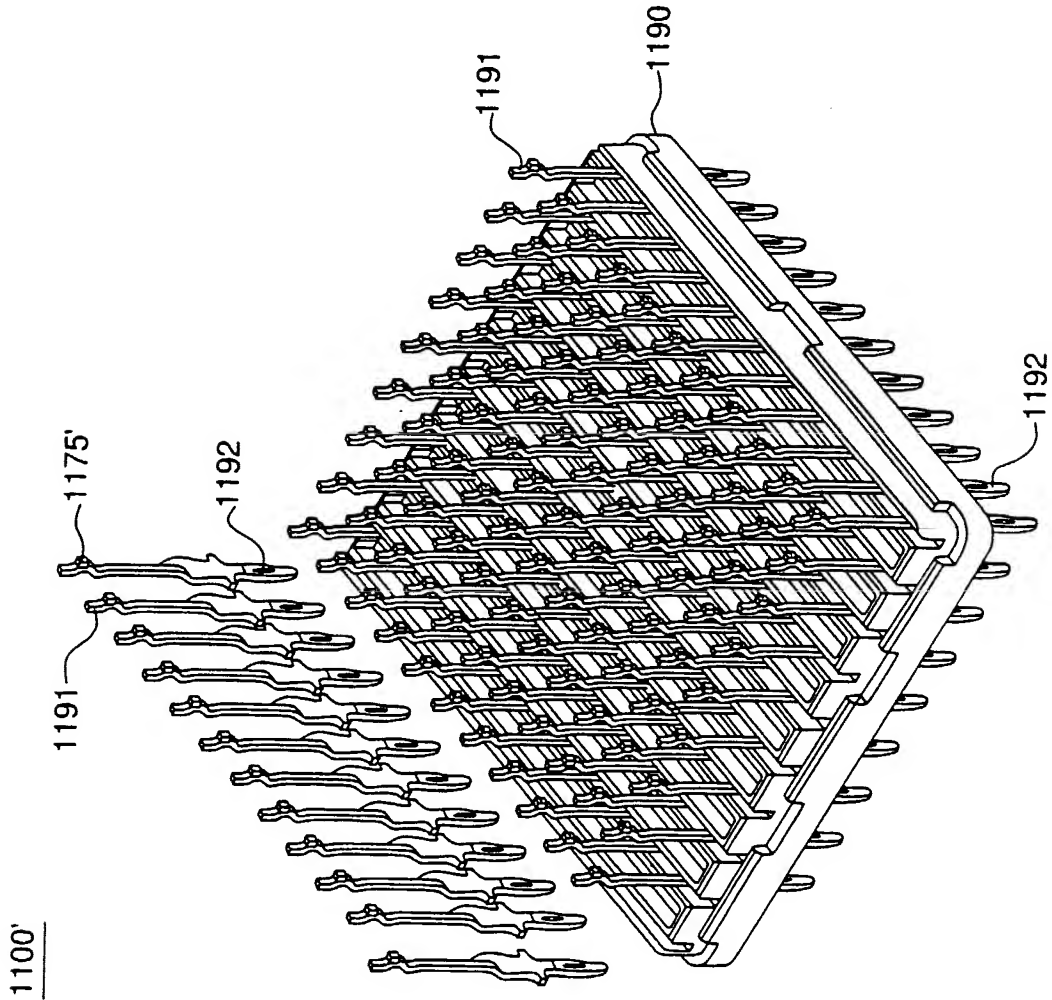


FIG. 32

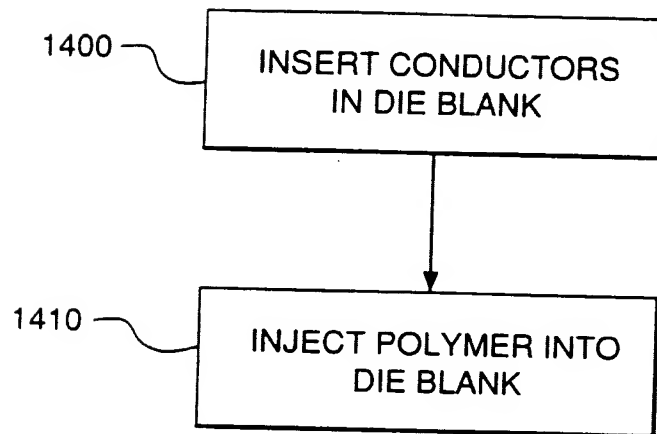
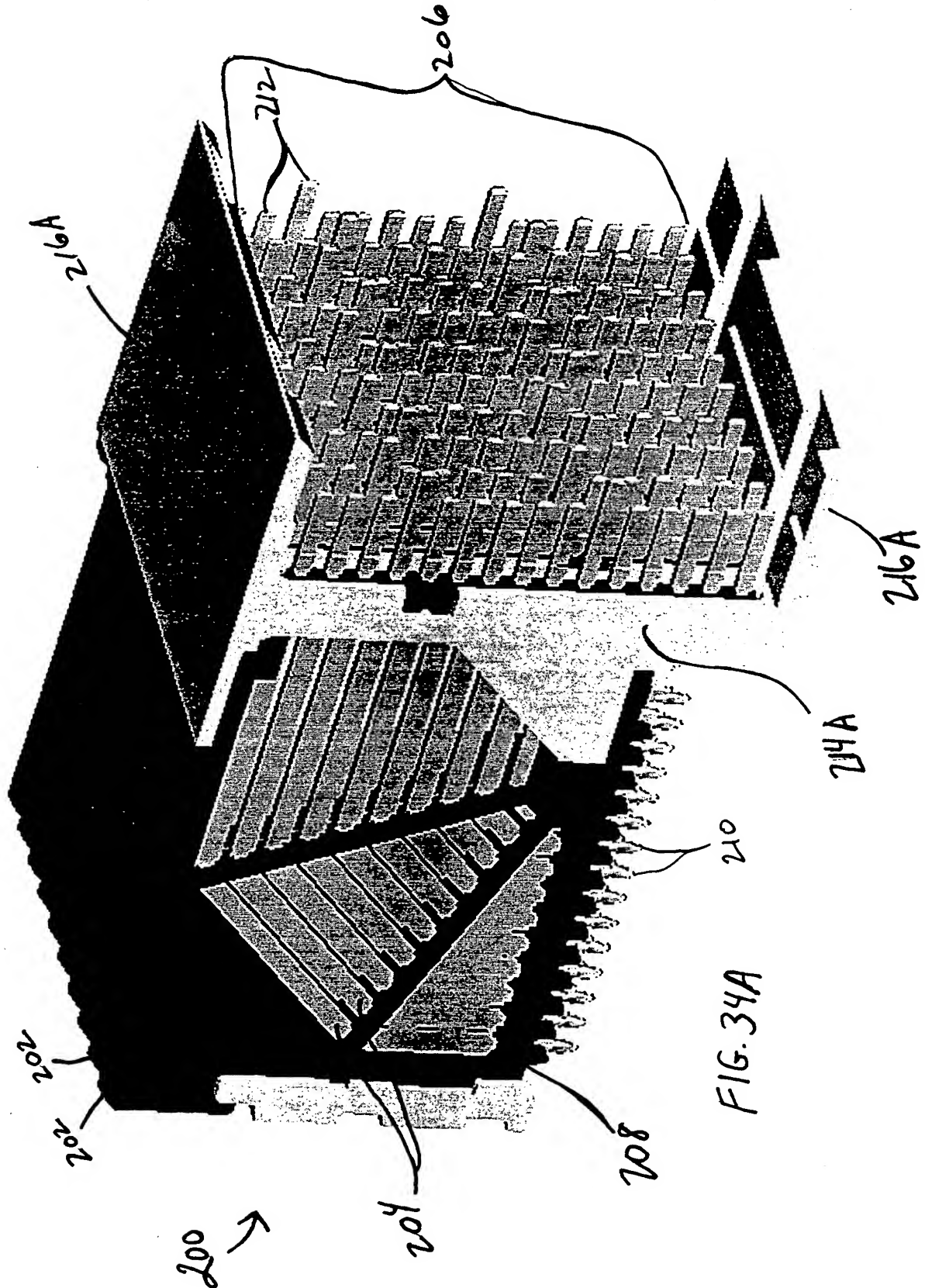


FIG. 33





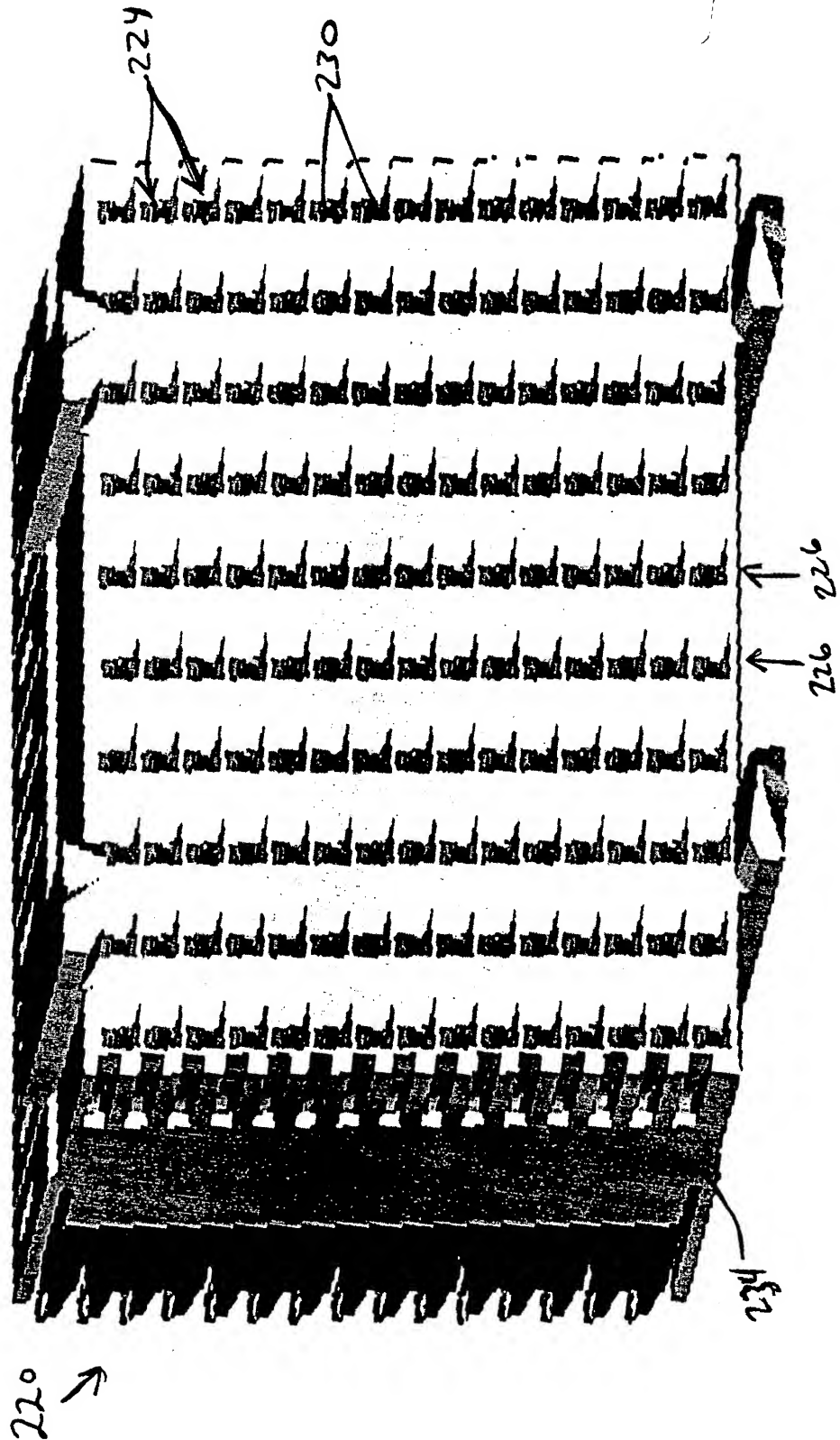


FIG. 35A

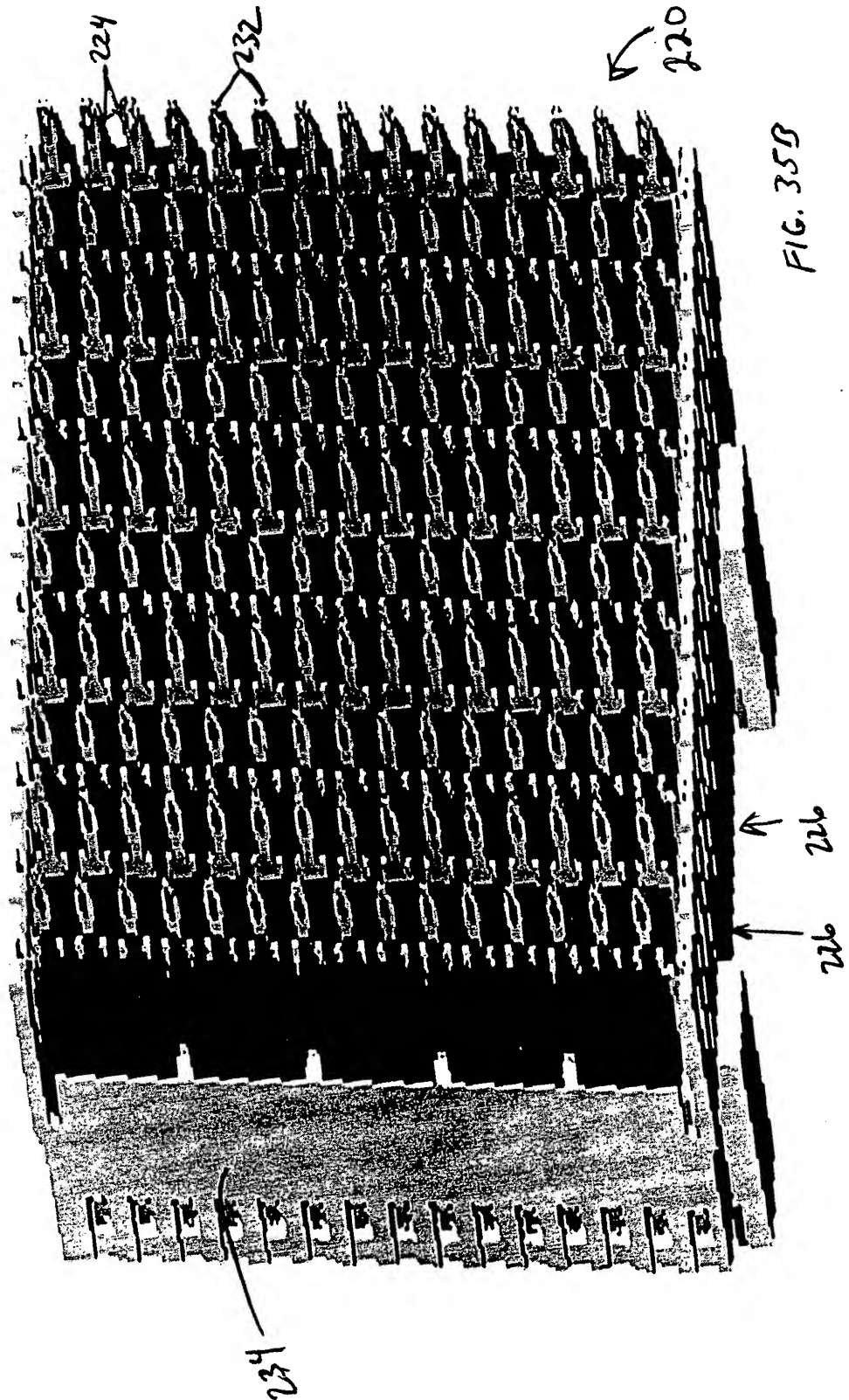


FIG. 35B

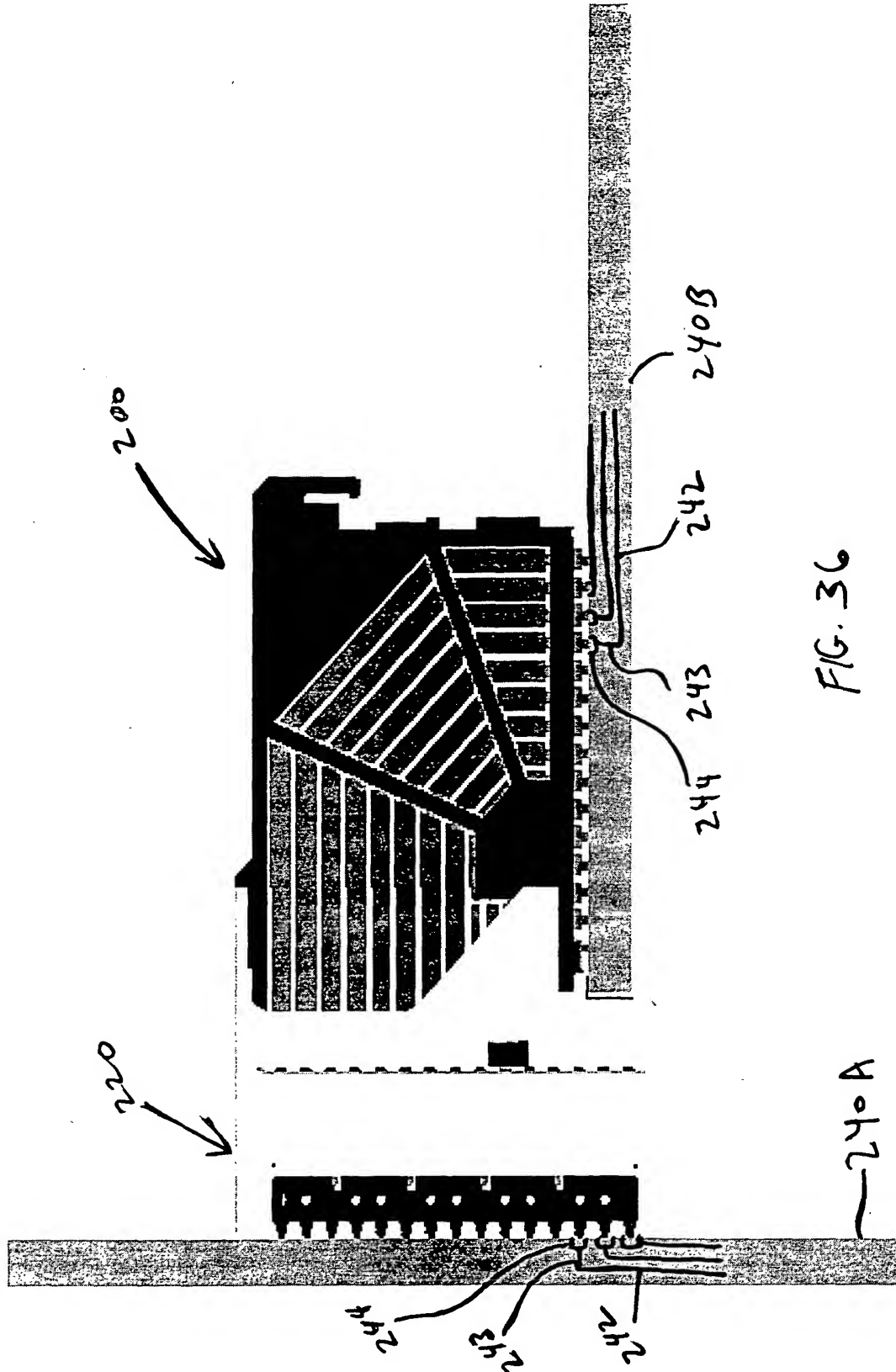
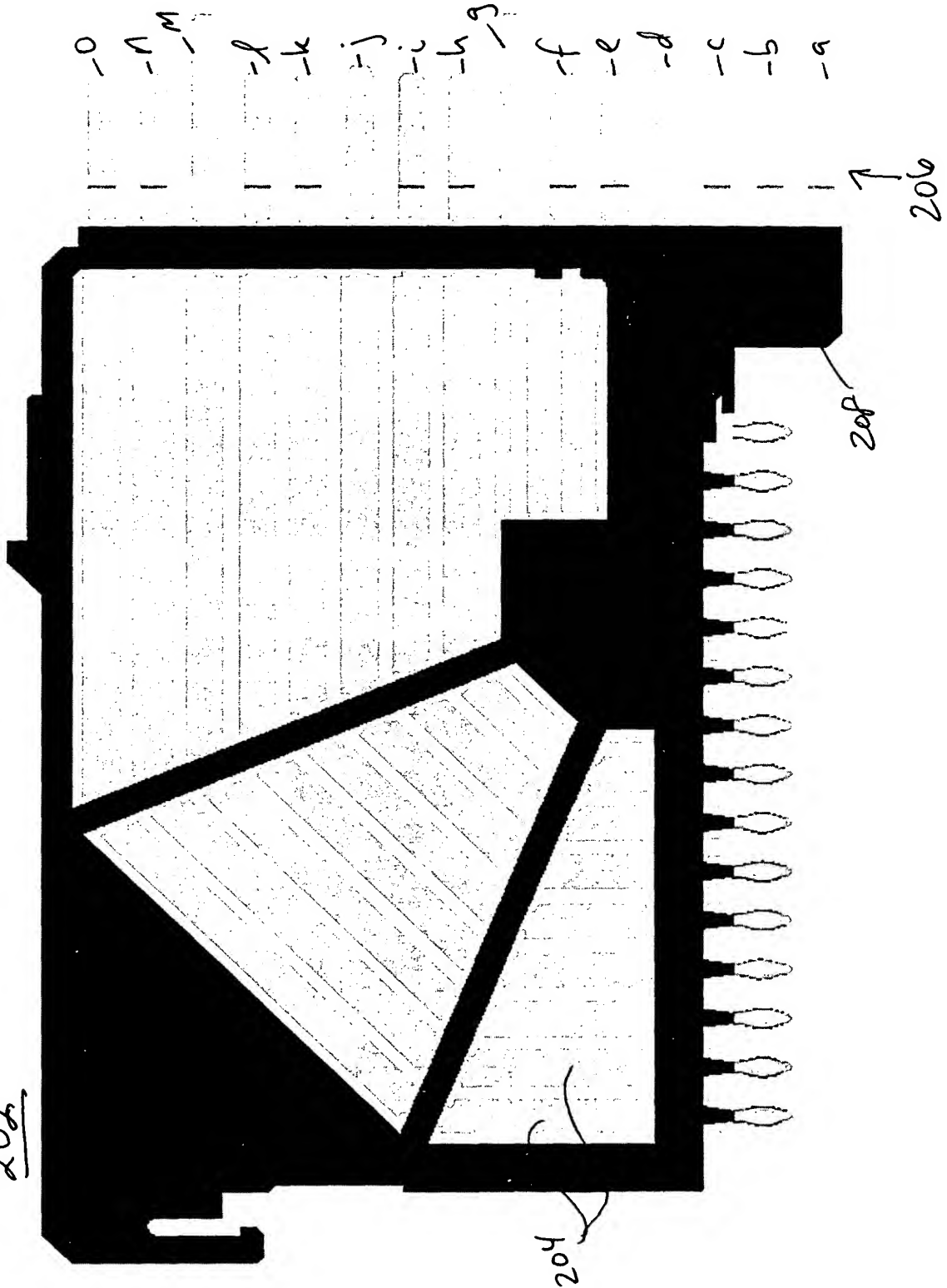
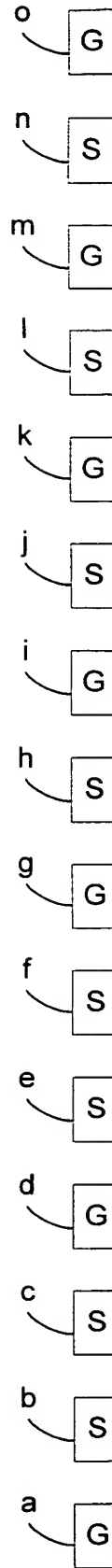
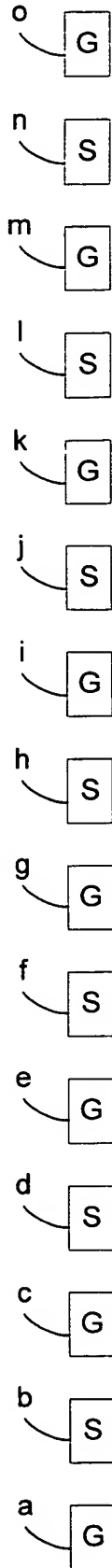
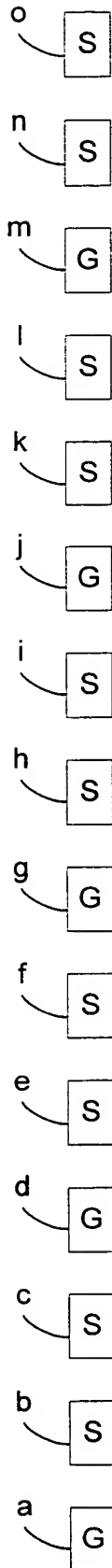


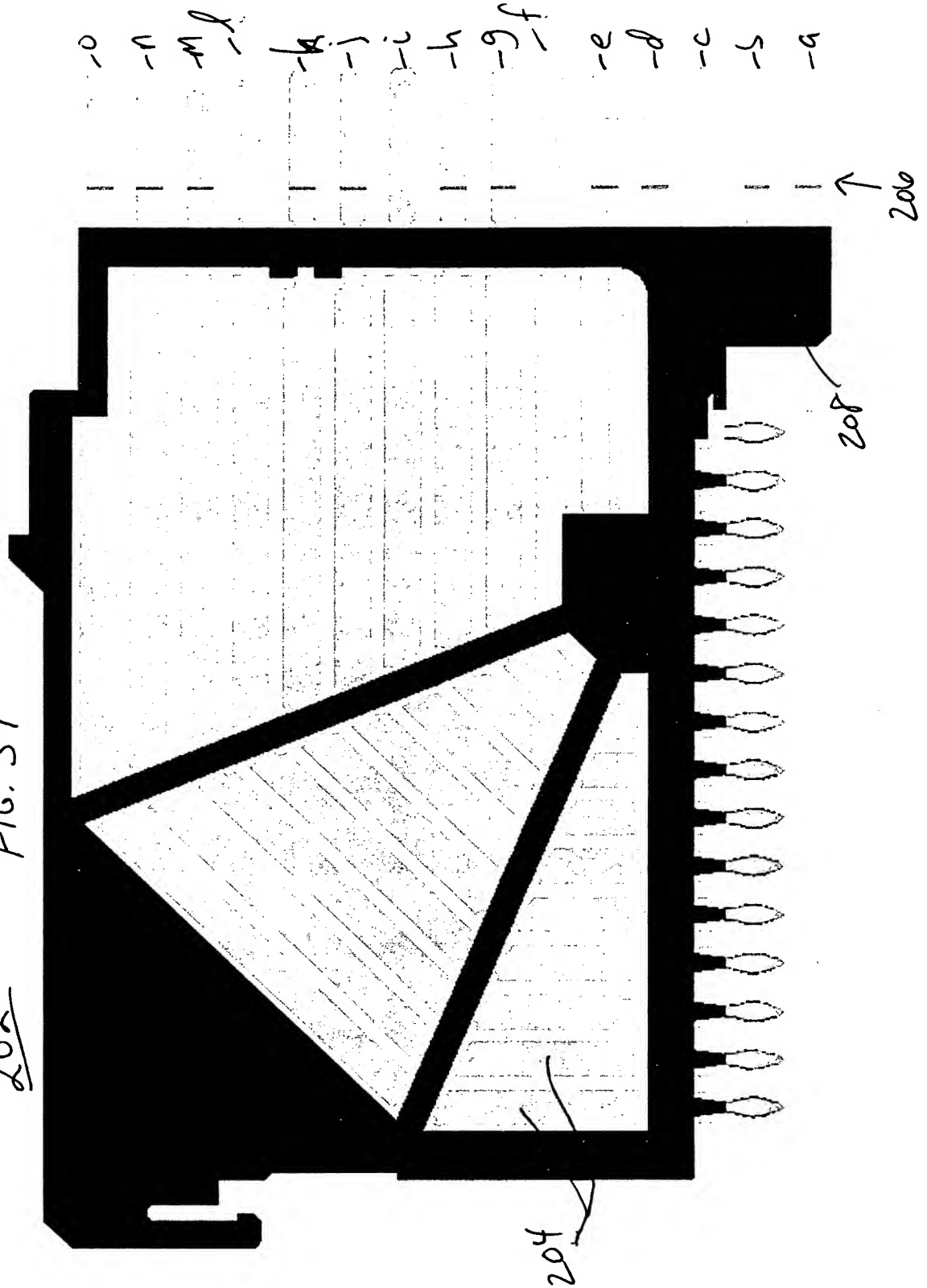
FIG. 37

202





202 FIG. 39



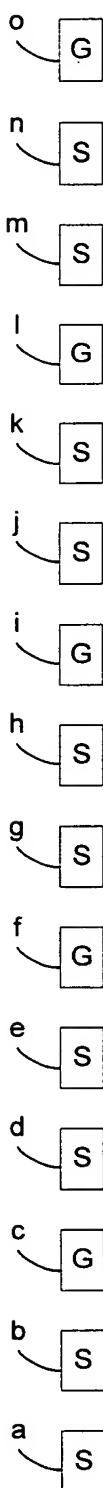


FIG. 40A

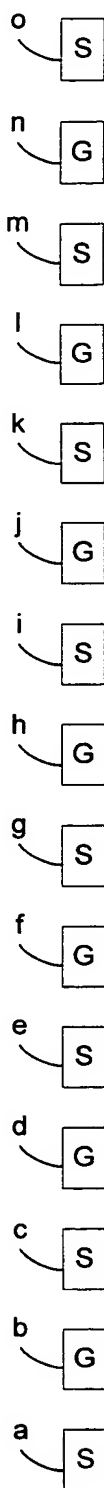


FIG. 40B

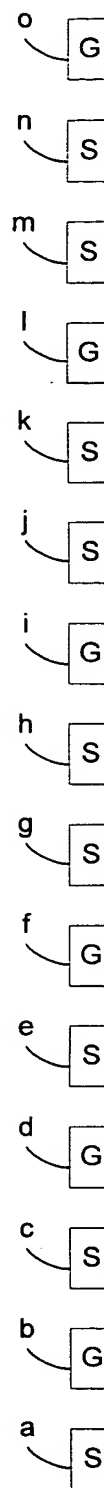


FIG. 40C

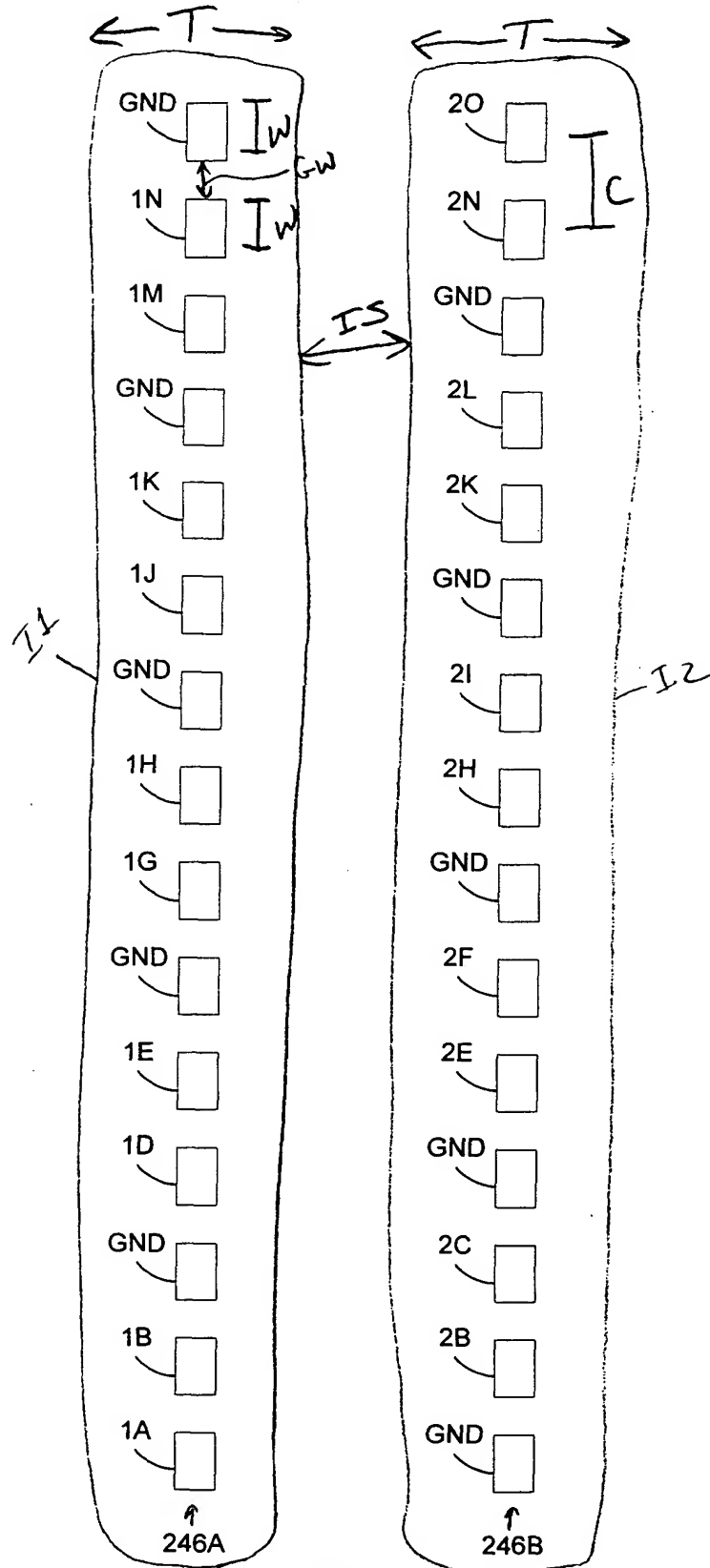
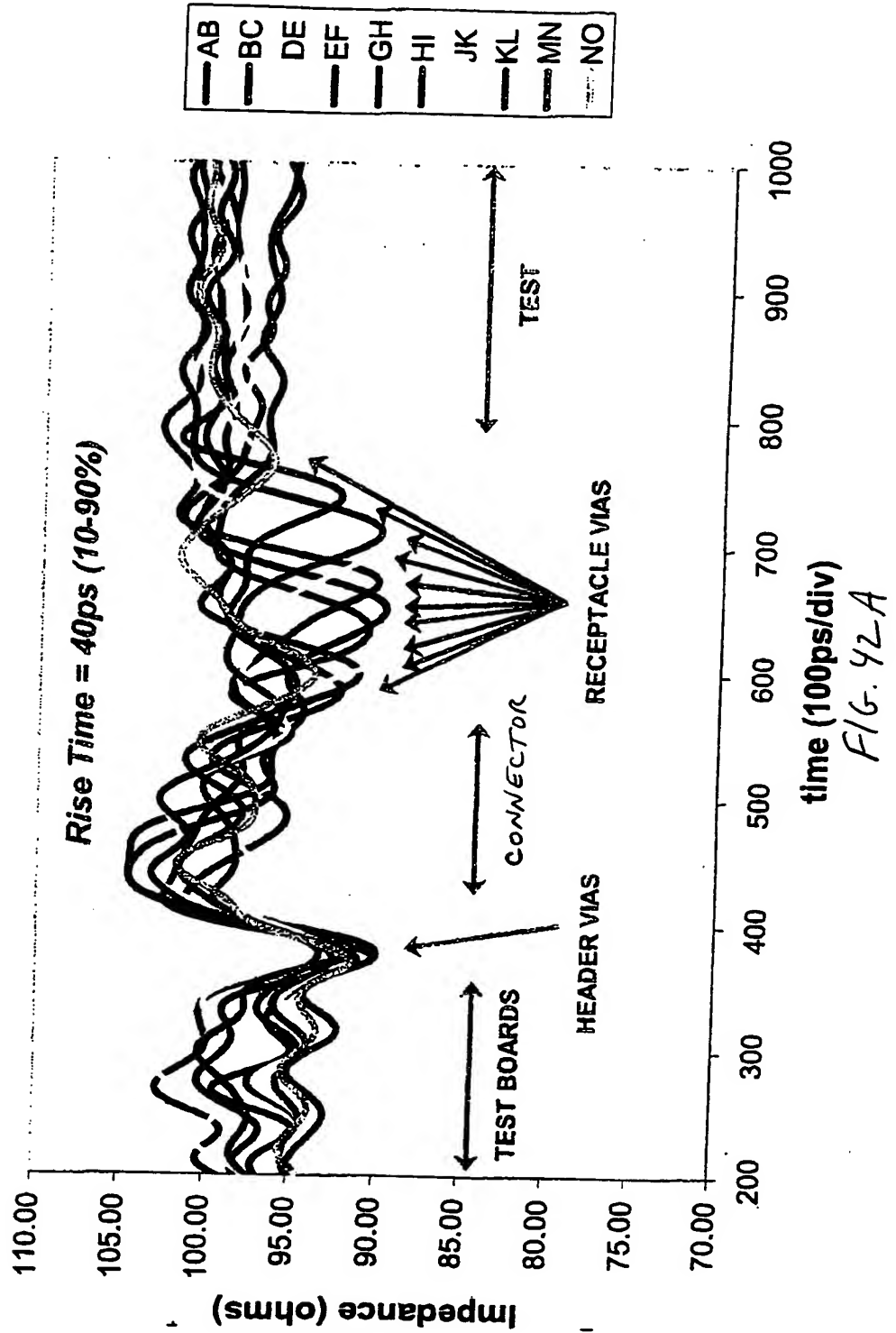
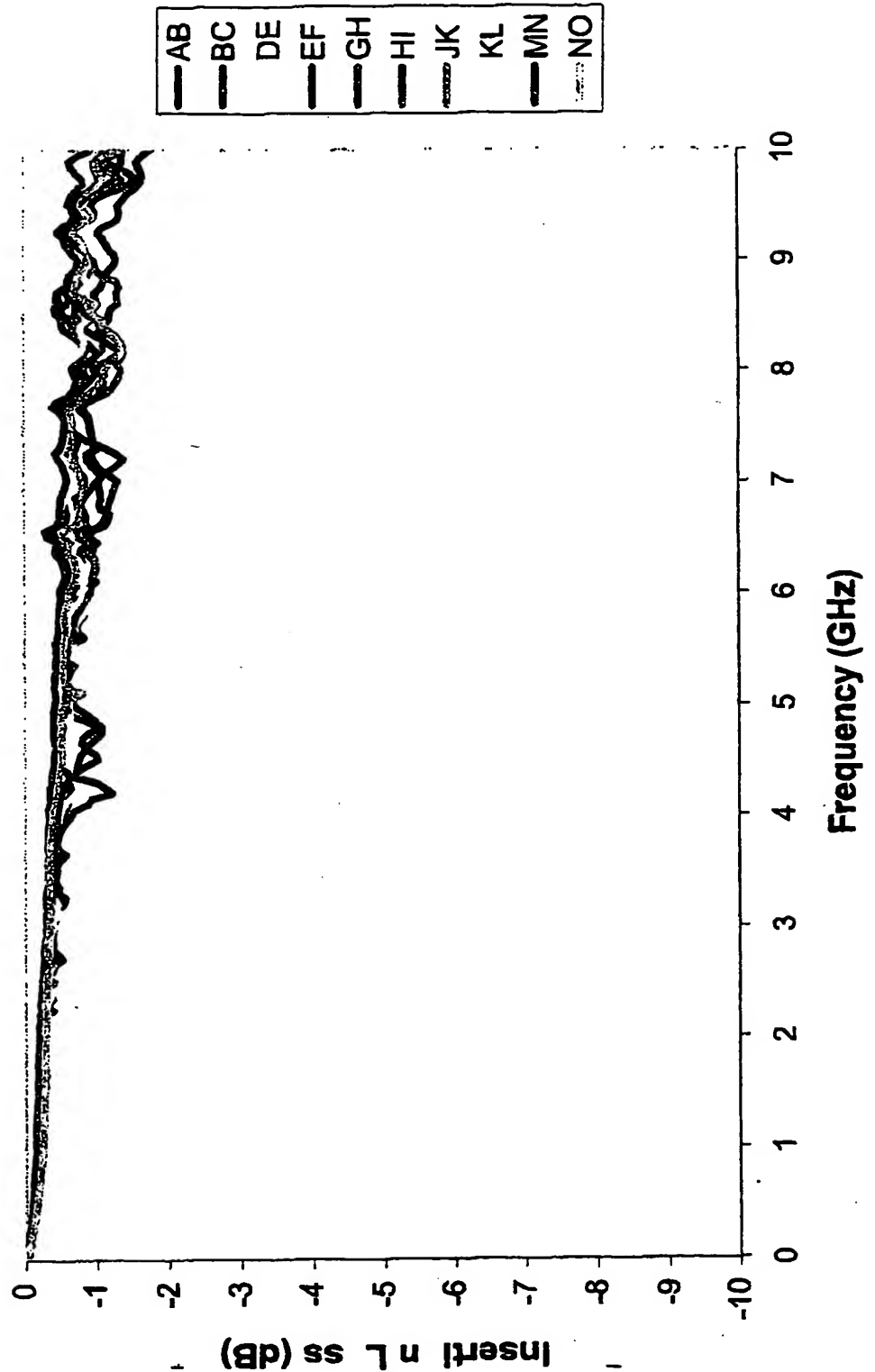


FIG. 41

IMPEDANCE





CROSSTALK

Worst-Case Multi-Active Near-End Crosstalk

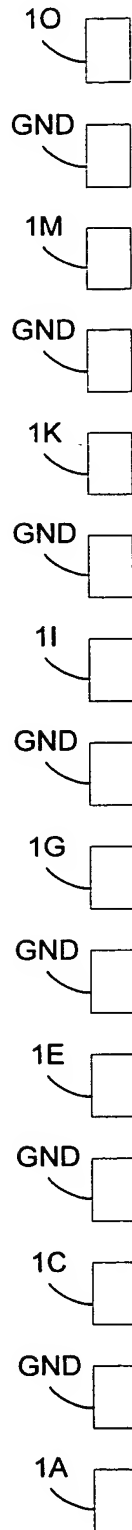
	AB	BC	DE	EF	GH	HI	JK	KL	MN	NO
40ps (10-90%)	1.9	2.4	2.4	2.3	2.5	2.2	2.4	2.1	2.6	1.7
100ps (10-90%)	1.4	1.8	1.7	1.8	1.9	1.7	2.0	1.7	1.8	1.0

FIG. 42C

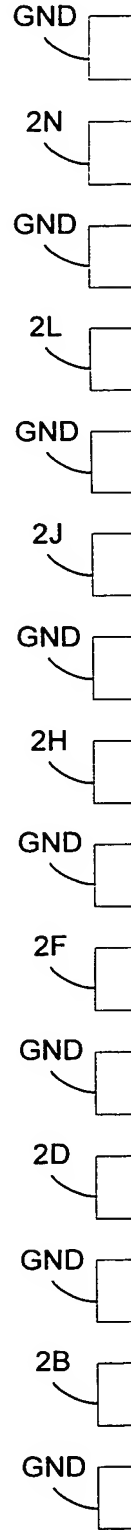
Worst-Case Multi-Active Far-End Crosstalk

	AB	BC	DE	EF	GH	HI	JK	KL	MN	NO
40ps (10-90%)	2.7	1.8	5.0	3.4	4.2	3.2	4.1	2.9	2.4	1.1
100ps (10-90%)	1.3	0.8	2.2	1.5	1.9	1.4	1.8	1.3	1.1	0.5

FIG. 42D



246A



246B

FIG. 43

IMPEDANCE

FIG. 44A

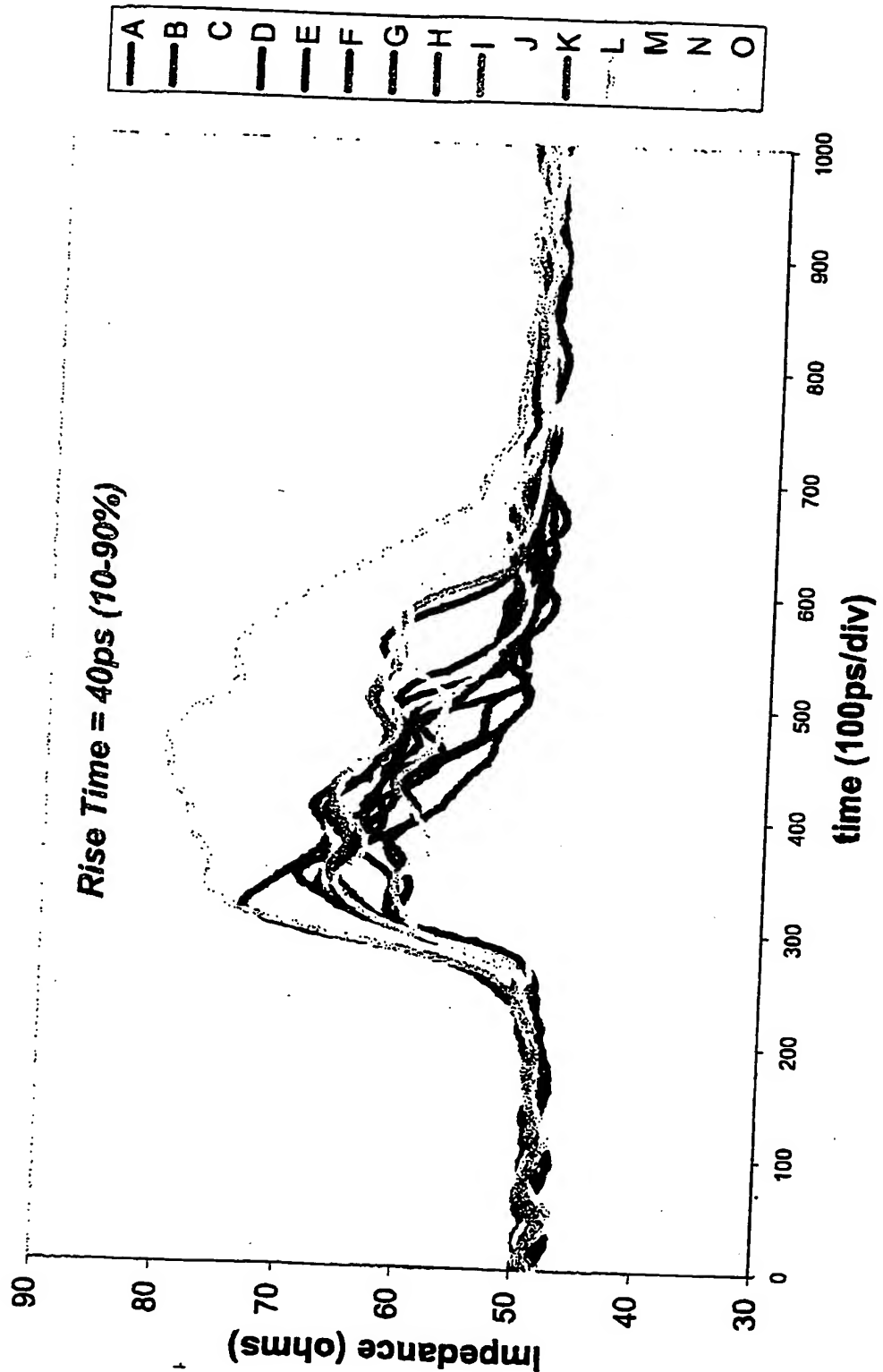
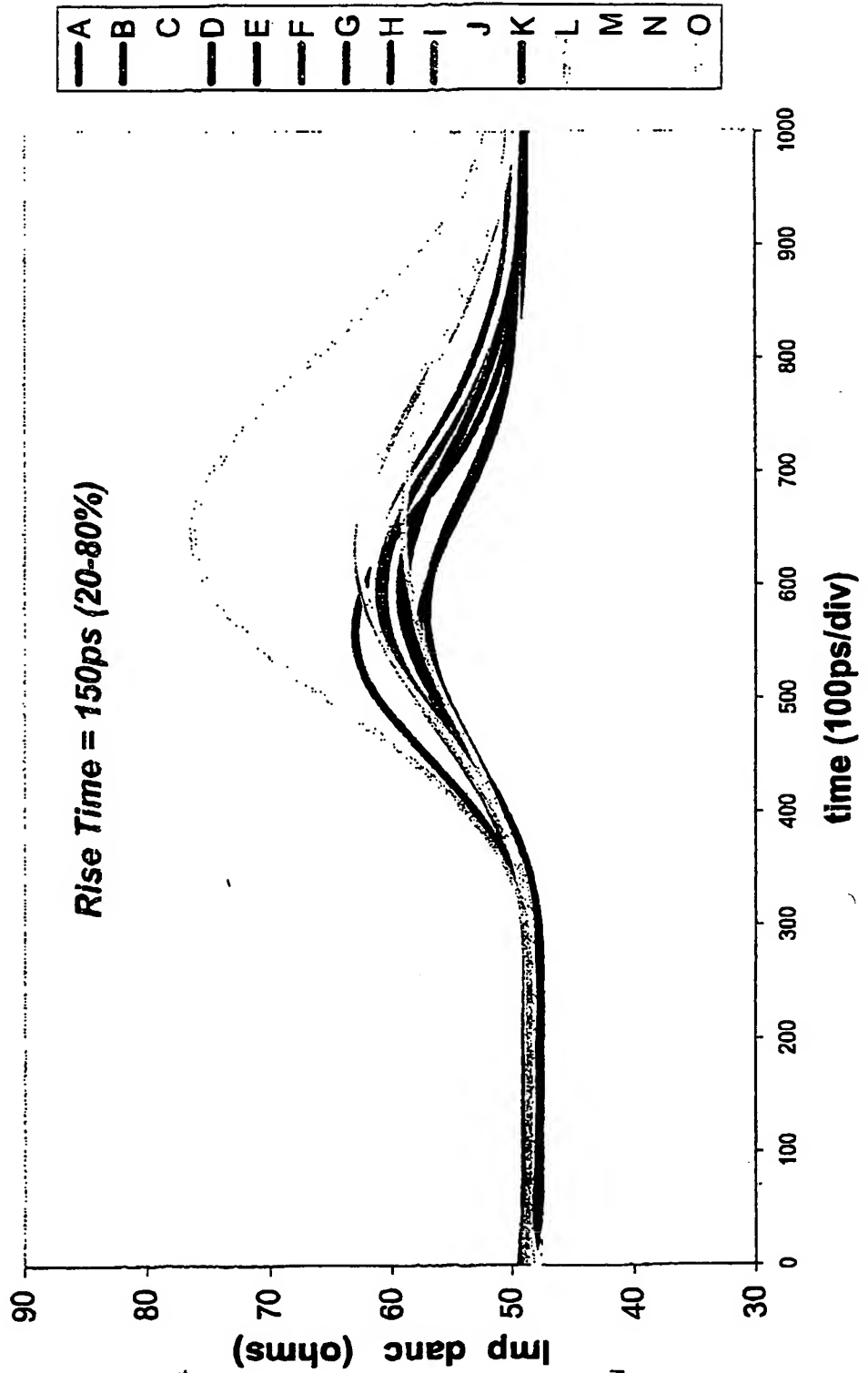
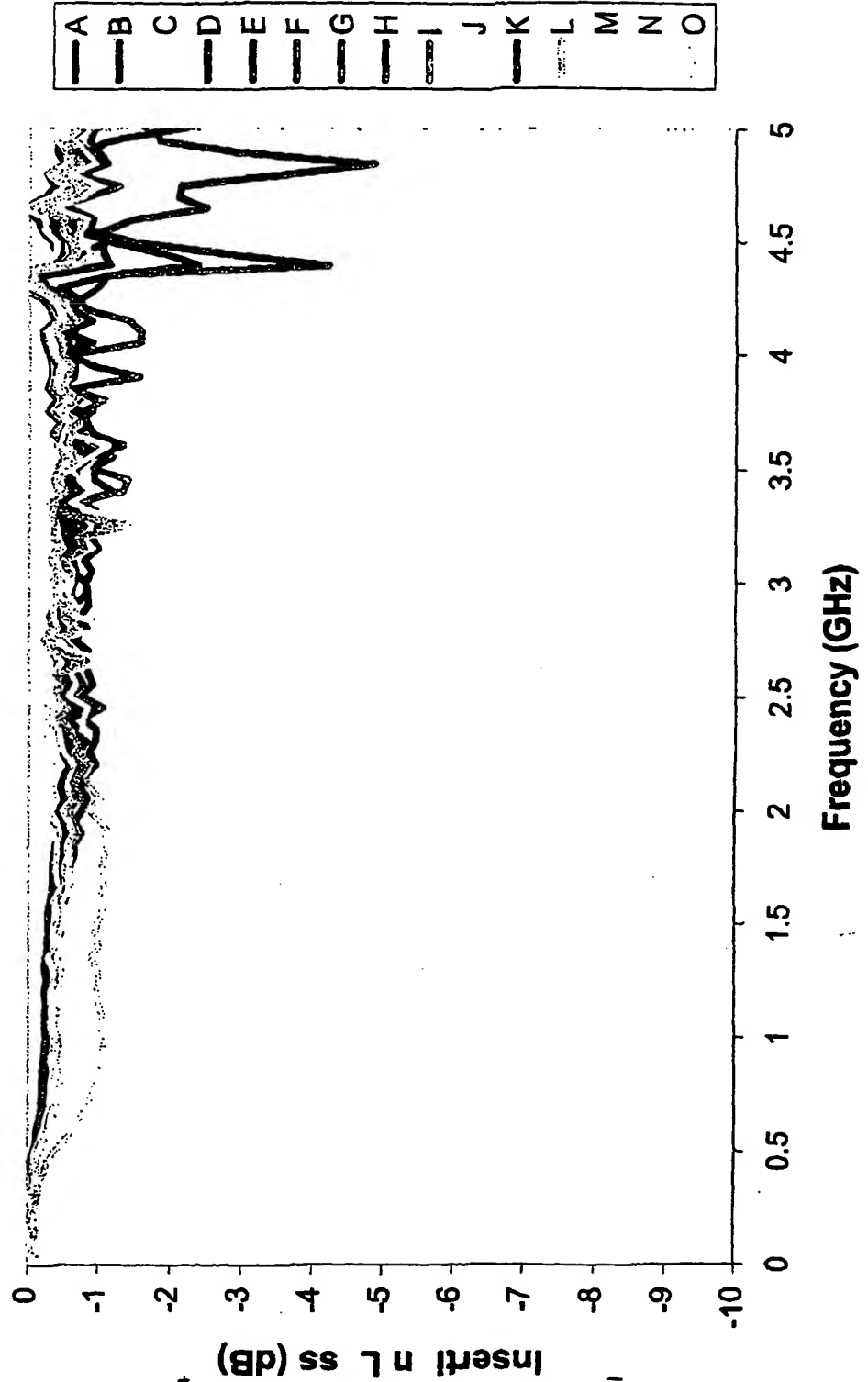


FIG. 44B IMPEDANCE



INSERTION LOSS

FIG. 44C



CROSSTALK

Worst-Case Multi-Active Near-End Crosstalk

150ps (20-80%)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	5.0	7.3	7.3	7.4	6.0	6.2	7.2	7.6	8.0	8.7	6.6	7.6	8.0	7.8	4.2

FIG. 44D

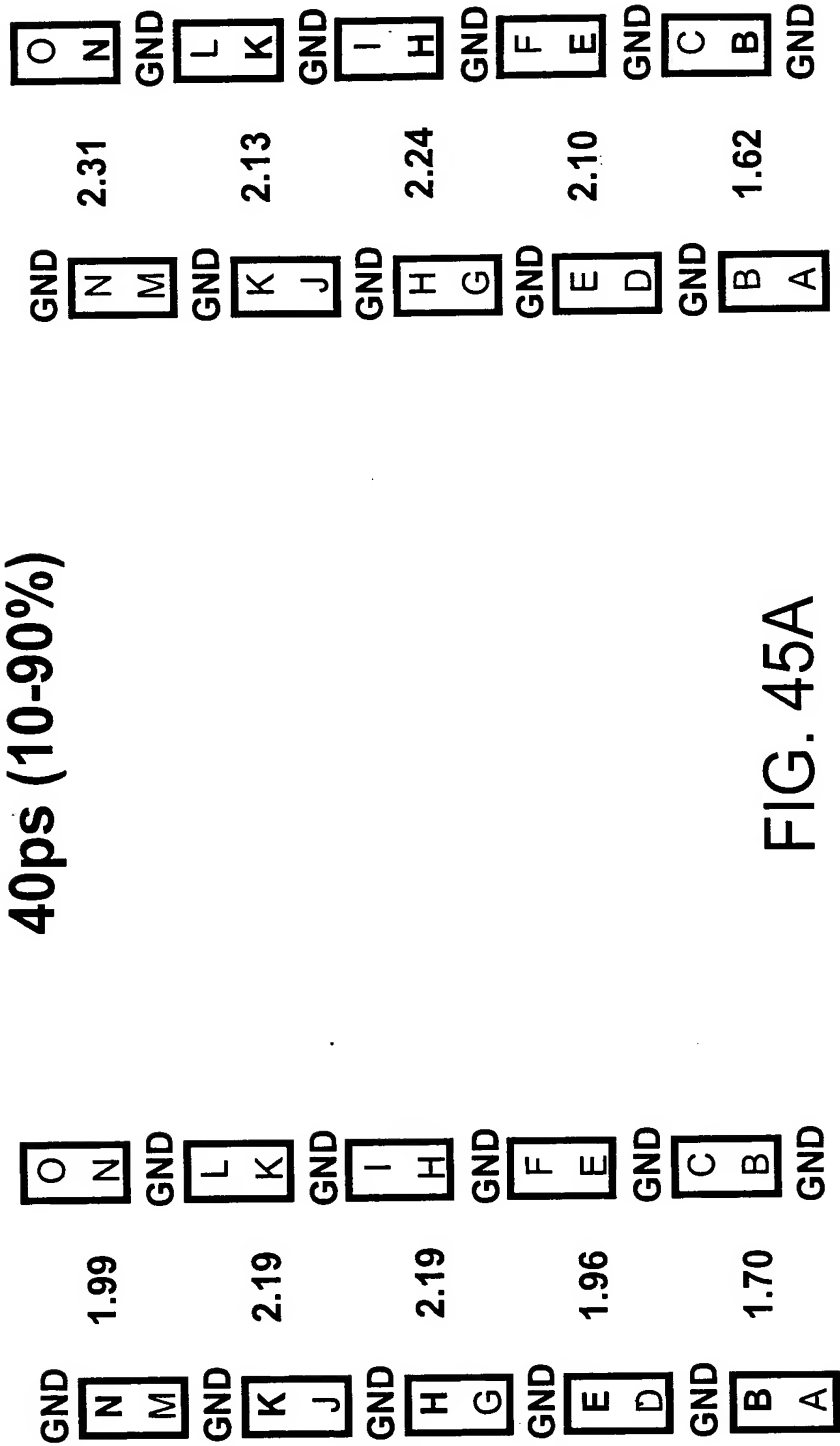
Worst-Case Multi-Active Far-End Crosstalk

150ps (20-80%)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	2.0	2.9	2.4	2.4	2.6	2.4	2.9	2.9	2.5	2.8	2.6	2.7	2.8	2.8	1.7

FIG. 44E

Single-Ended IMLA to Differential IMLA

Near-End Crosstalk Approximation



Single-Ended IMLA to Differential IMLA

Far-End Crosstalk Approximation

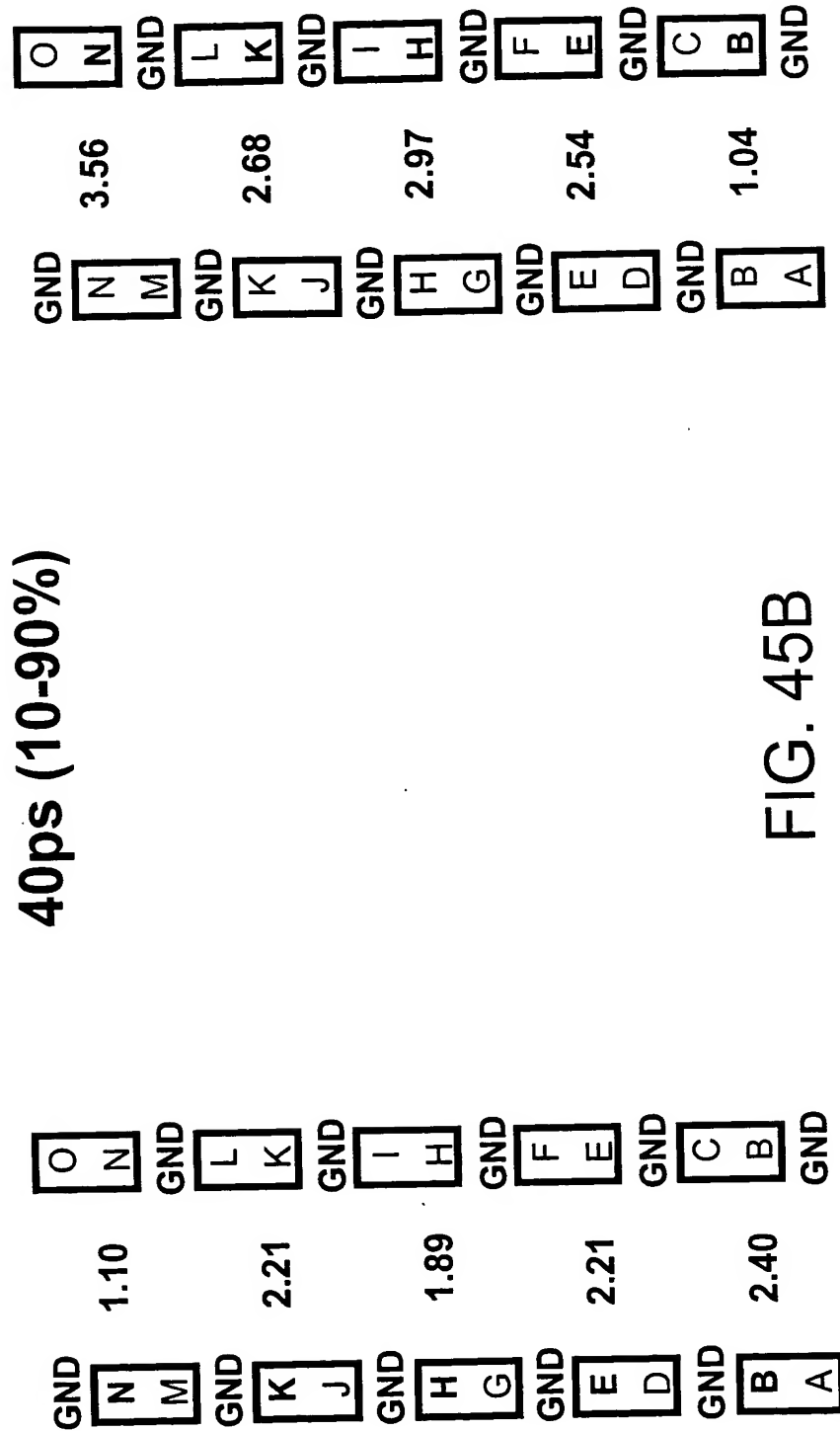


FIG. 45B

Single-Ended IMLA to Differential IMLA

Near-End Crosstalk Approximation

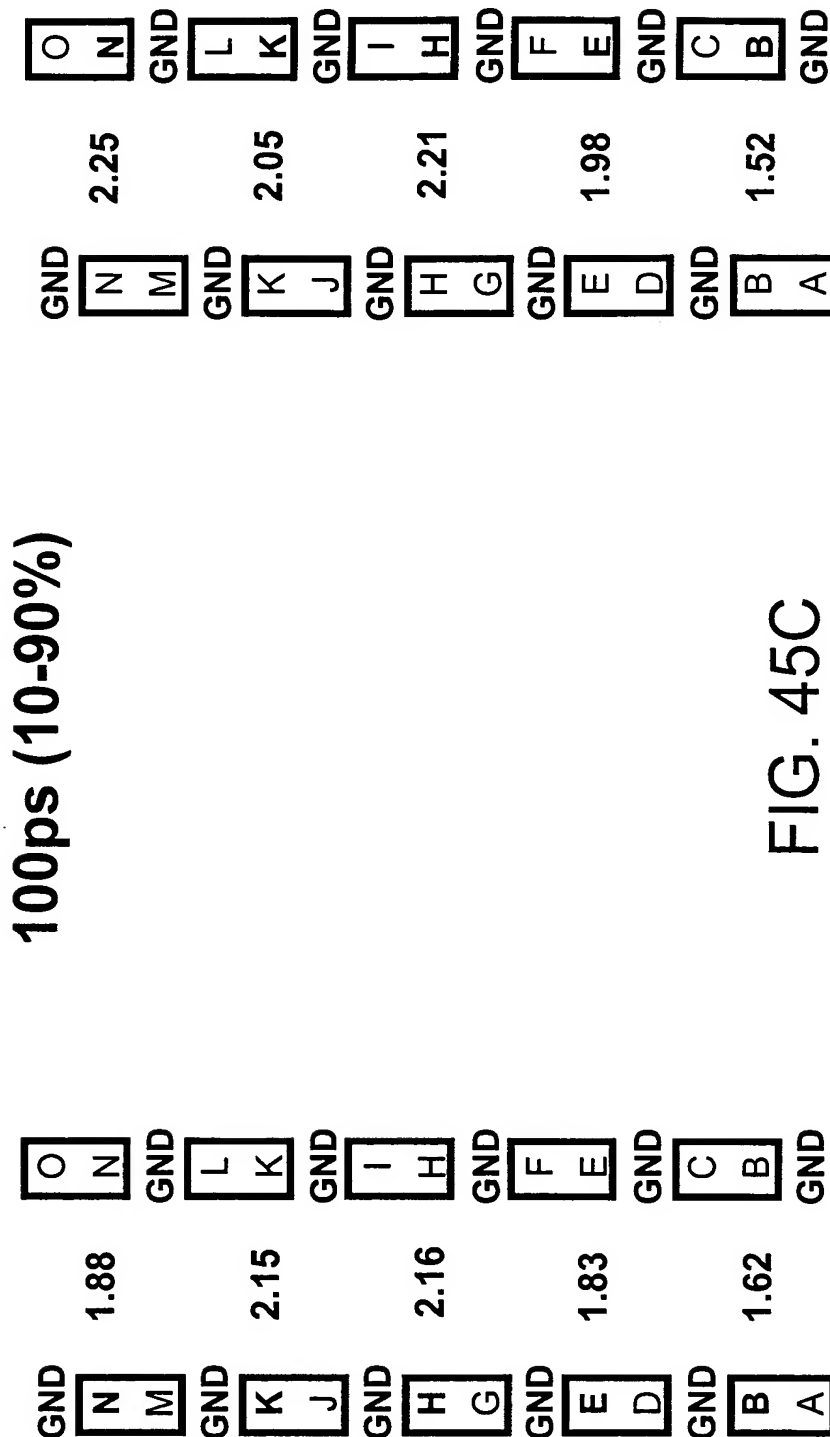
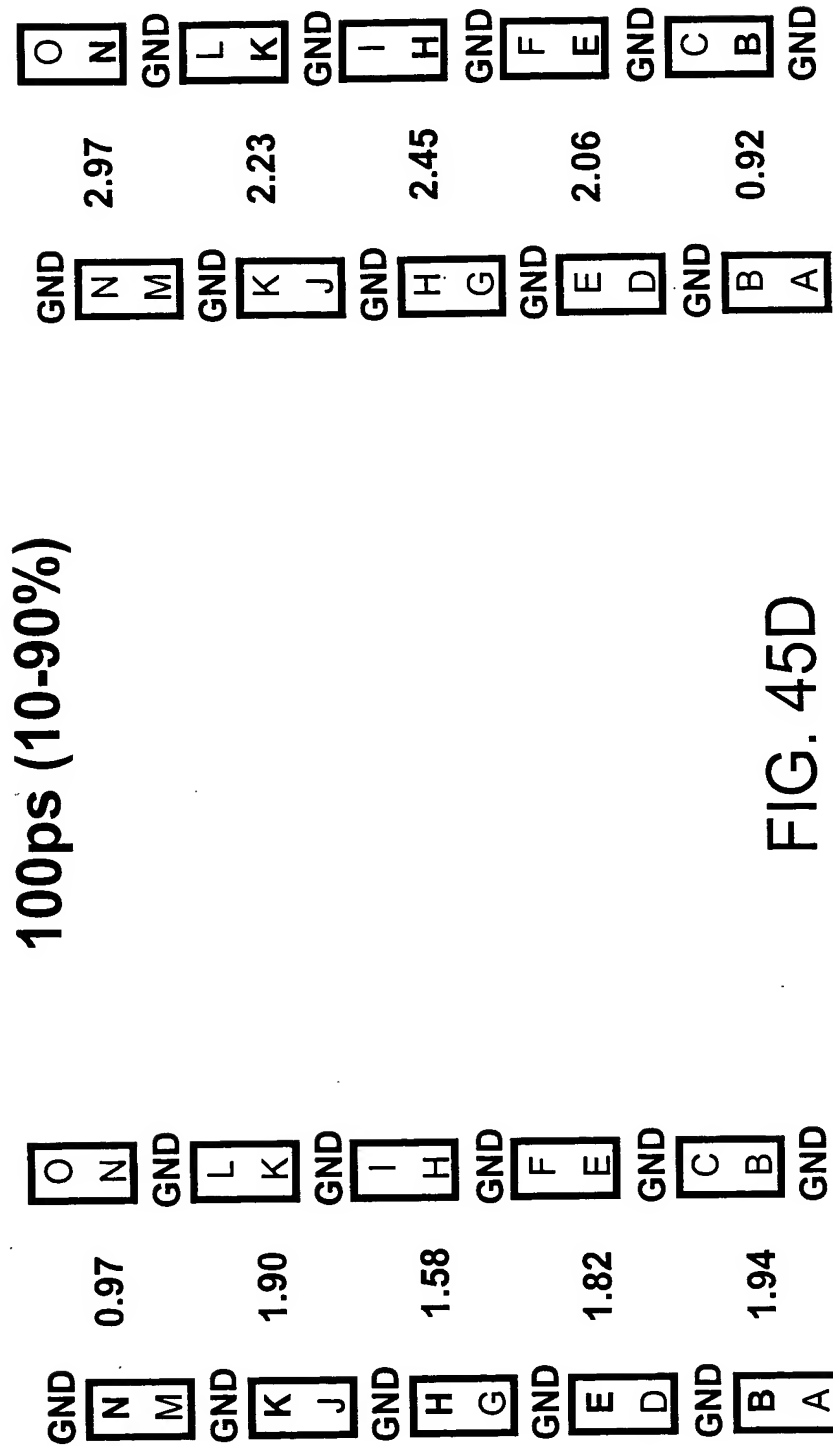


FIG. 45C

Single-Ended IMLA to Differential IMLA

Far-End Crosstalk Approximation



Single-Ended IMLA to Differential IMLA

Near-End Crosstalk Approximation

150ps (20-80%)

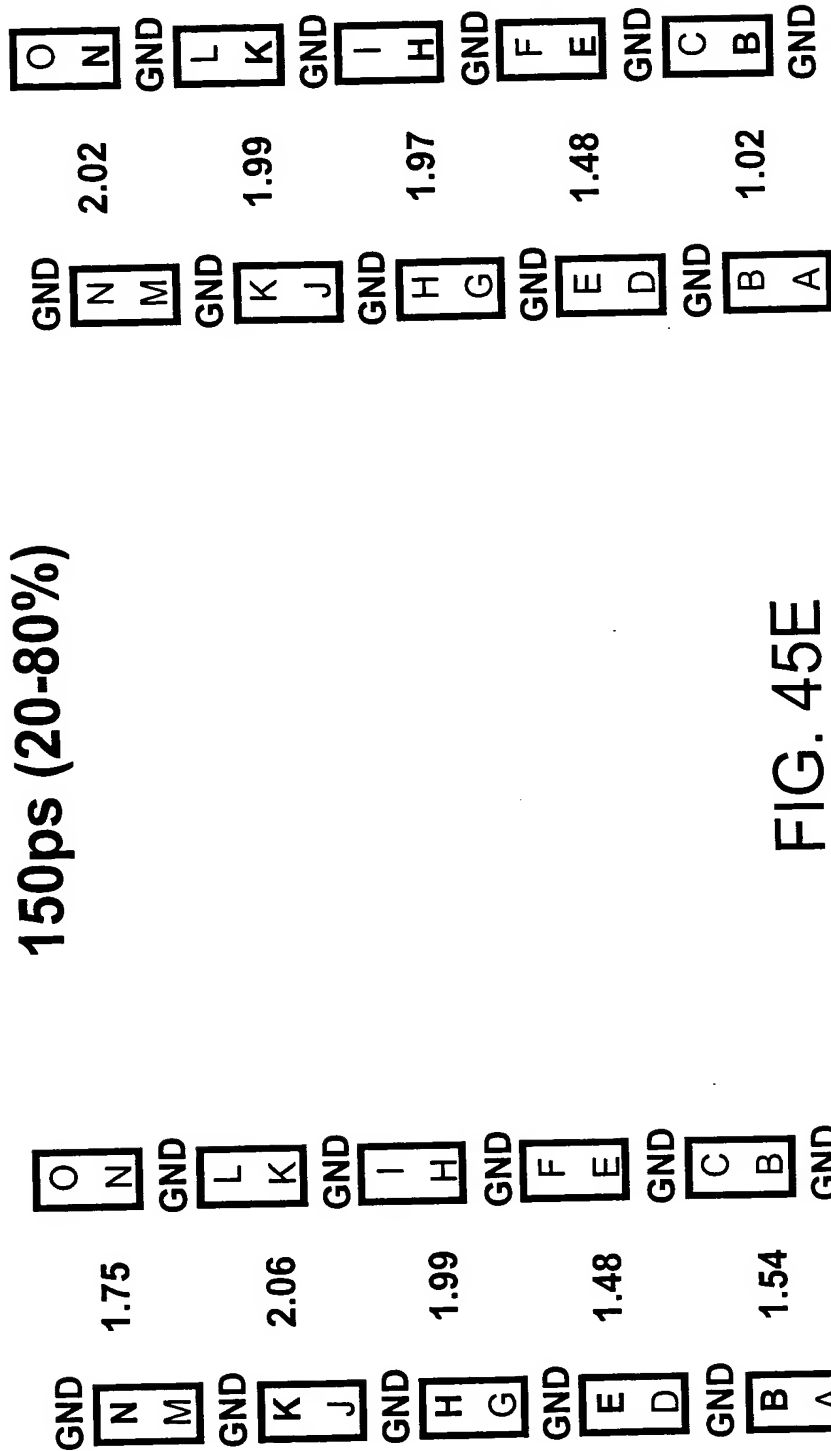


FIG. 45E

Single-Ended IMLA to Differential IMLA

Far-End Crosstalk Approximation

150ps (20-80%)

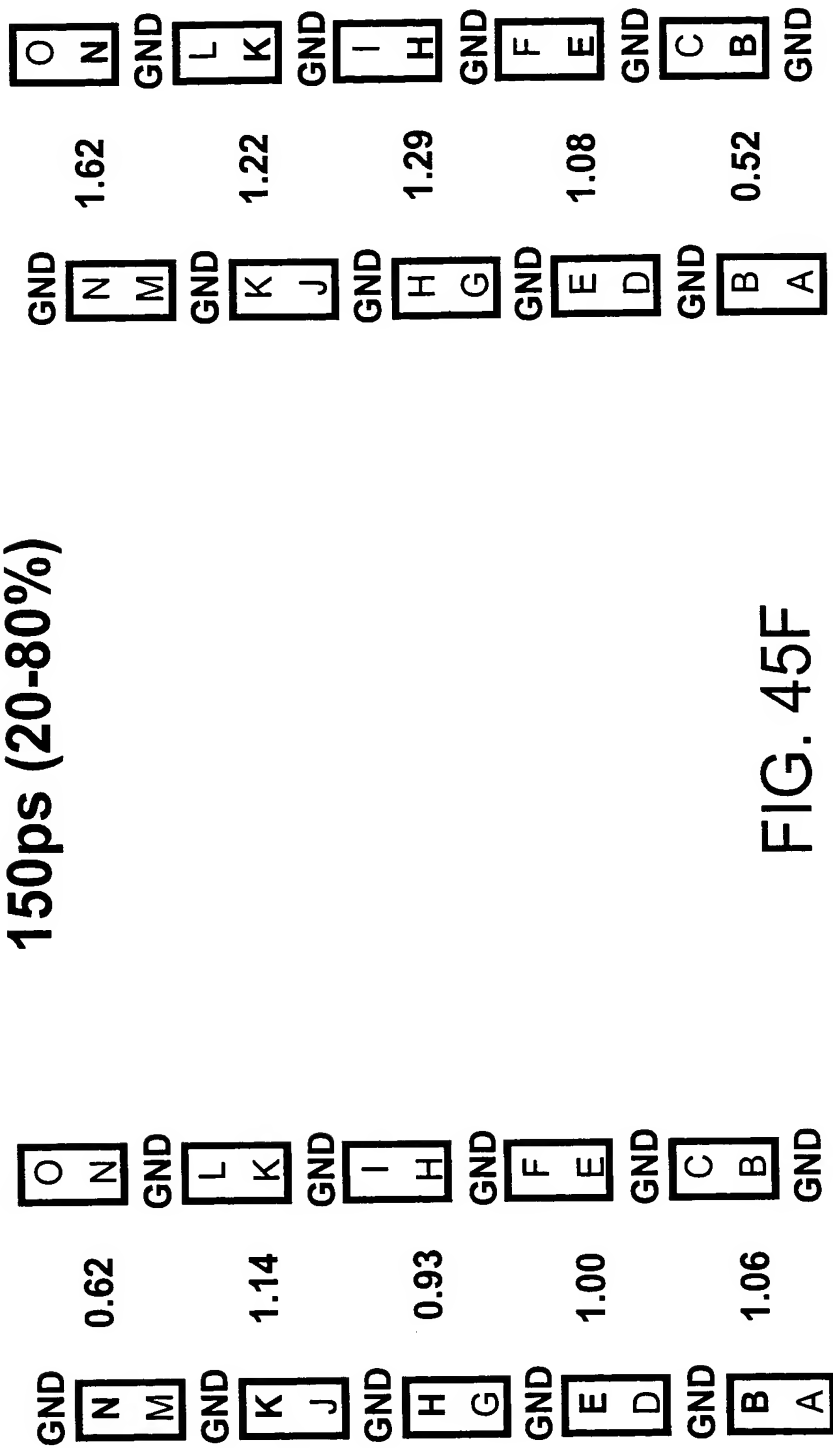


FIG. 45F

Differential IMLA to Single-Ended IMLA

Near-End Crosstalk Approximation

40ps (10-90%)

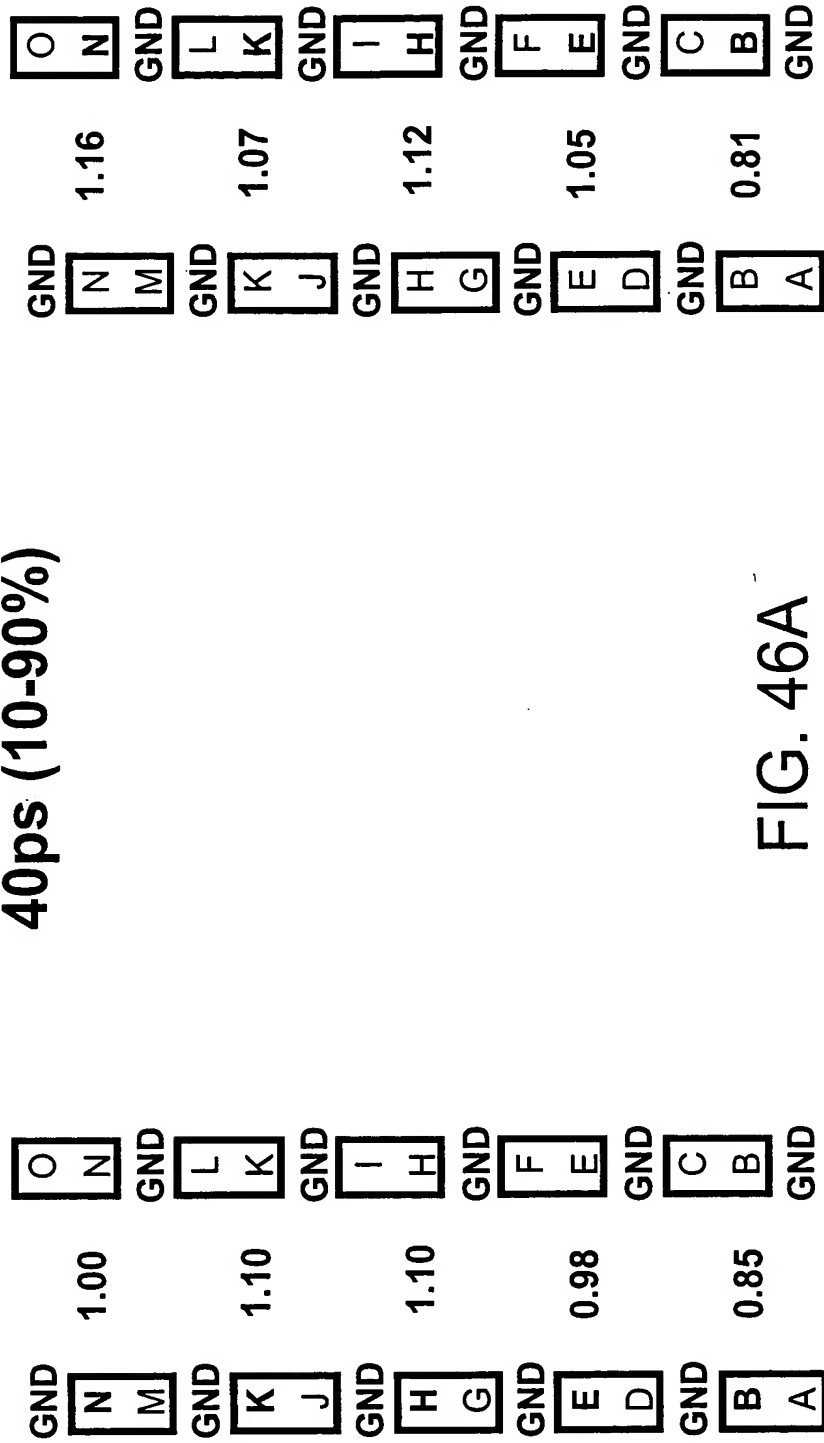


FIG. 46A

Differential IMLA to Single-Ended IMLA

Far-End Crosstalk Approximation

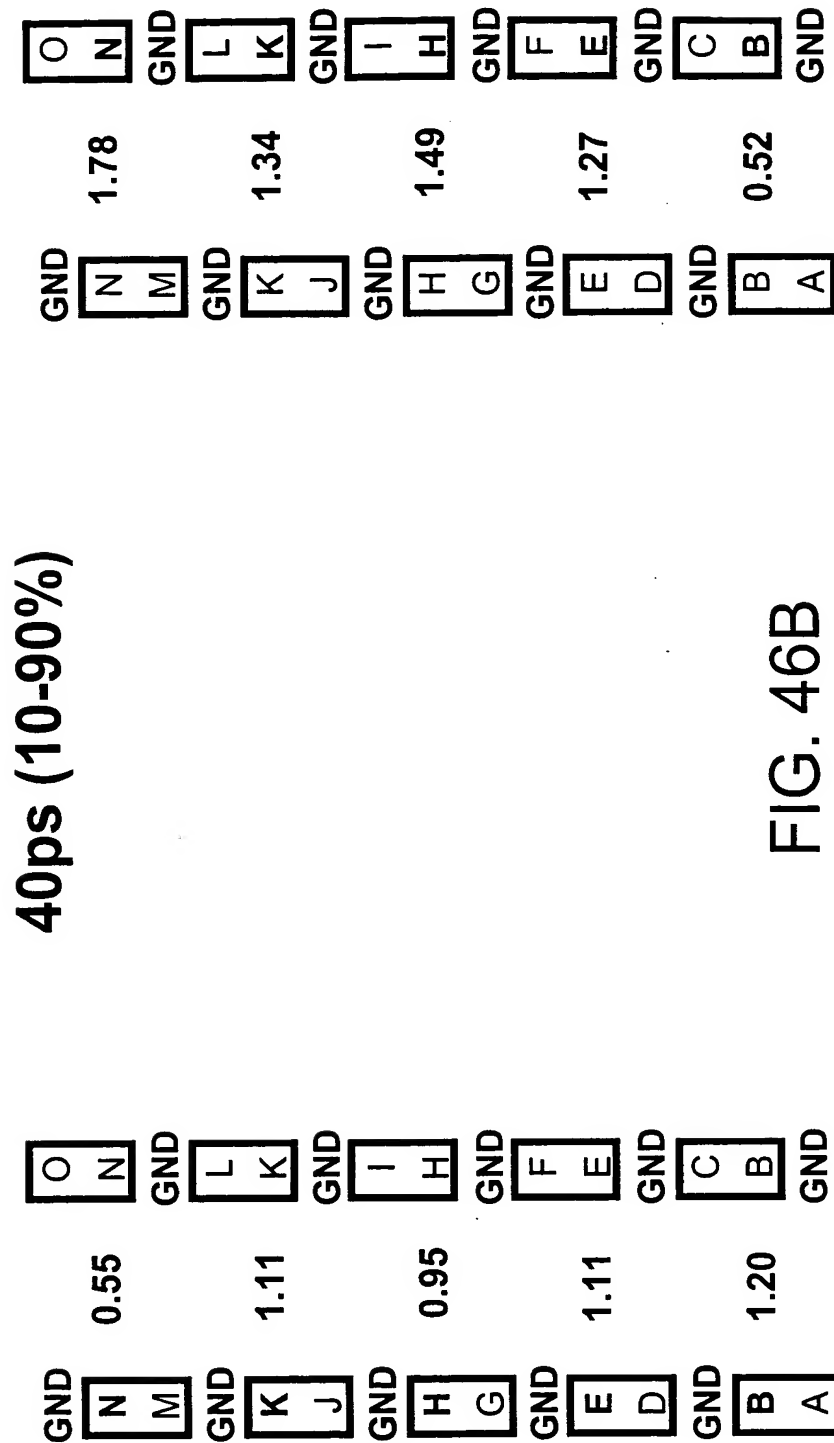


FIG. 46B

Differential IMLA to Single-Ended IMLA

Near-End Crosstalk Approximation

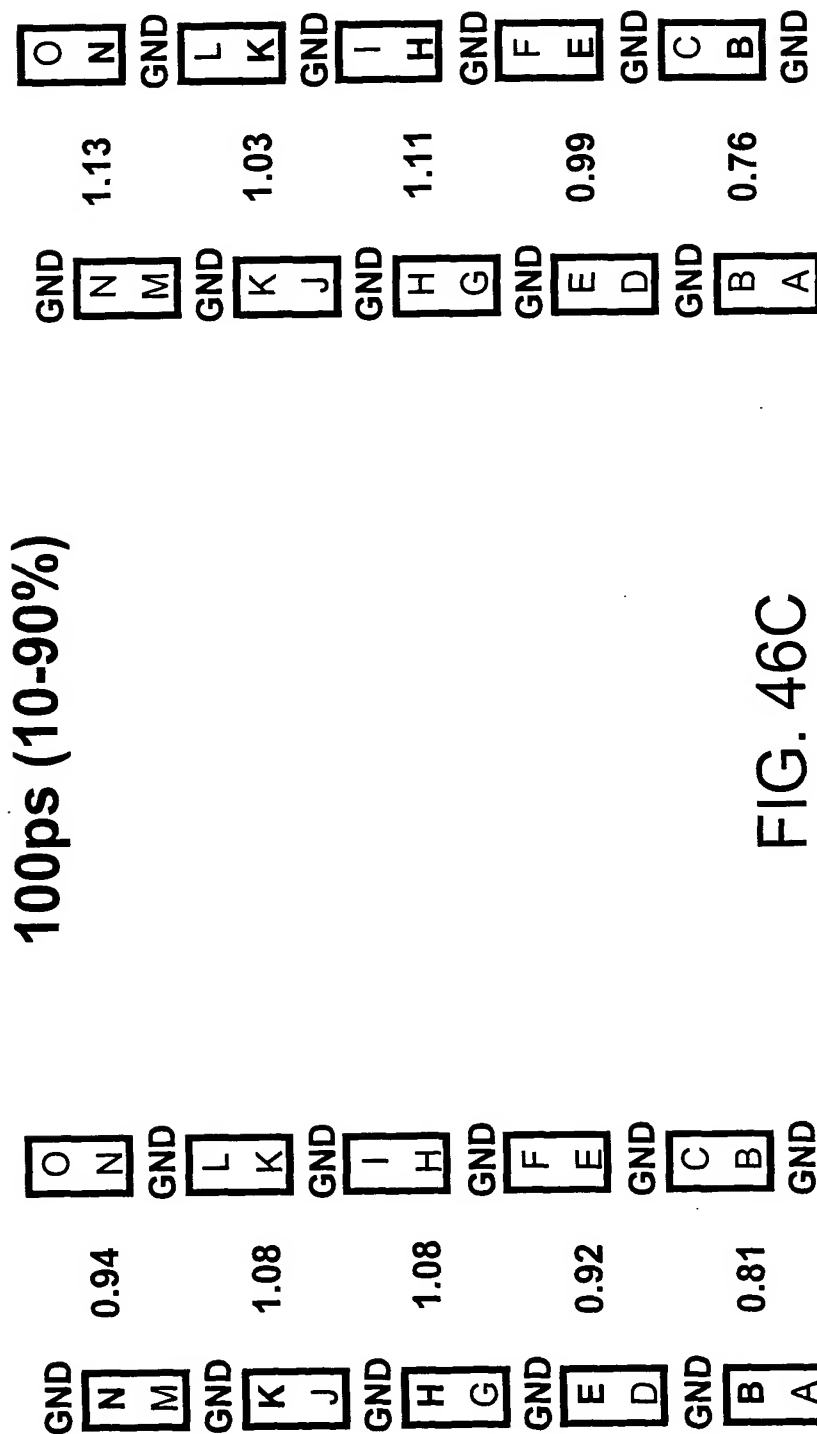


FIG. 46C

Differential IMLA to Single-Ended IMLA

Far-End Crosstalk Approximation

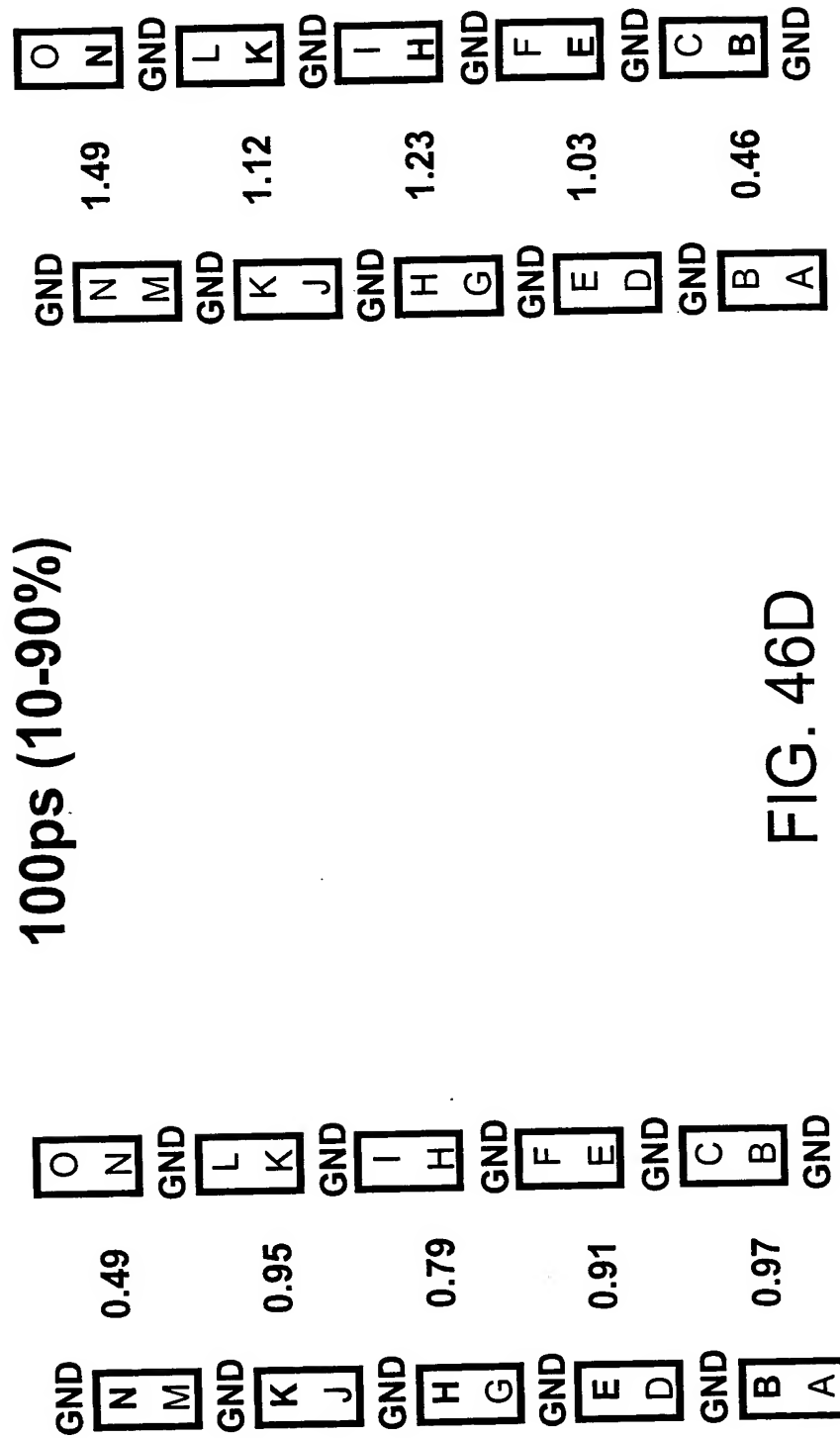


FIG. 46D

Differential IMLA to Single-Ended IMLA

Near-End Crosstalk Approximation

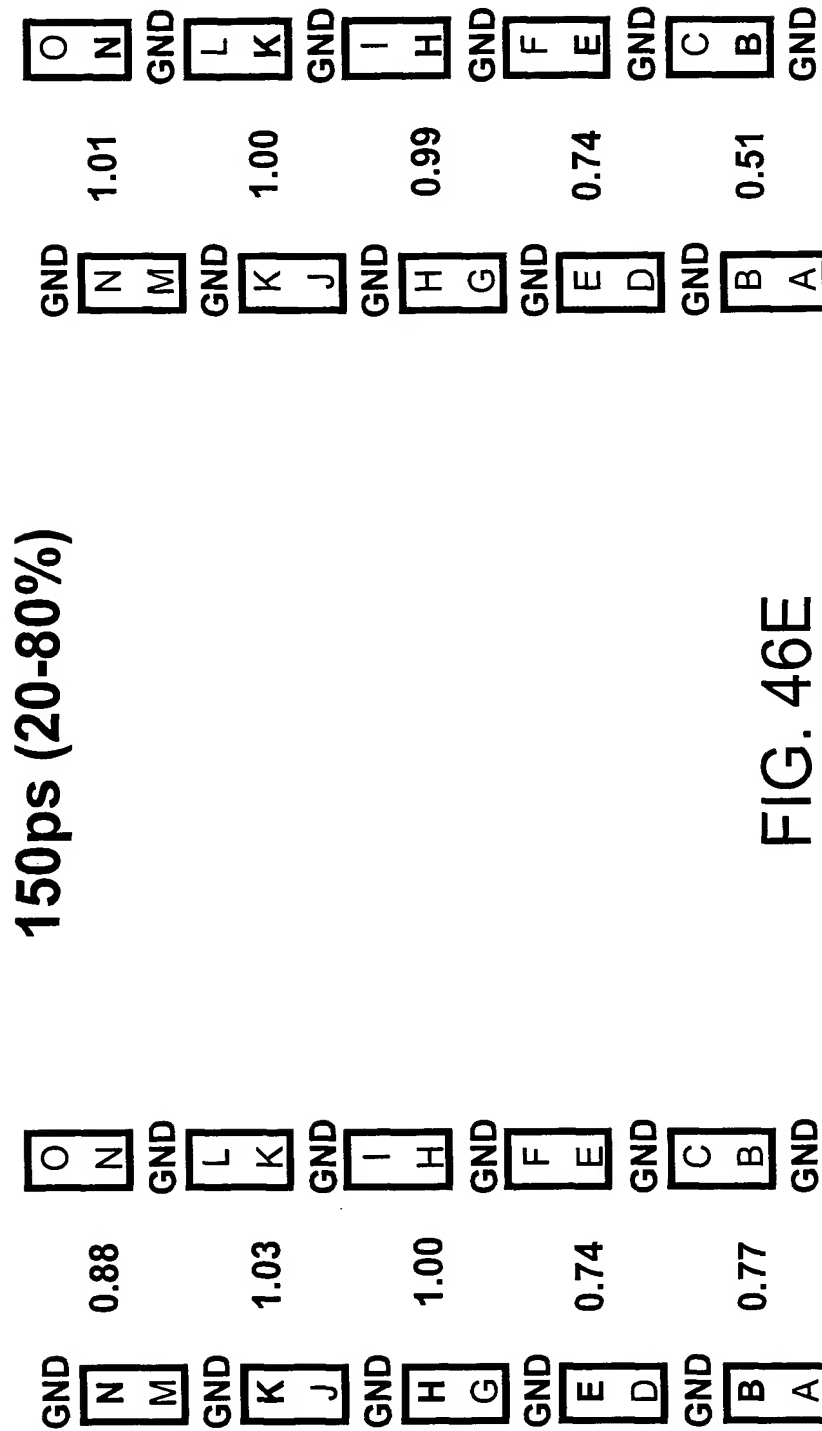


FIG. 46E

Differential IMLA to Single-Ended IMLA

Far-End Crosstalk Approximation

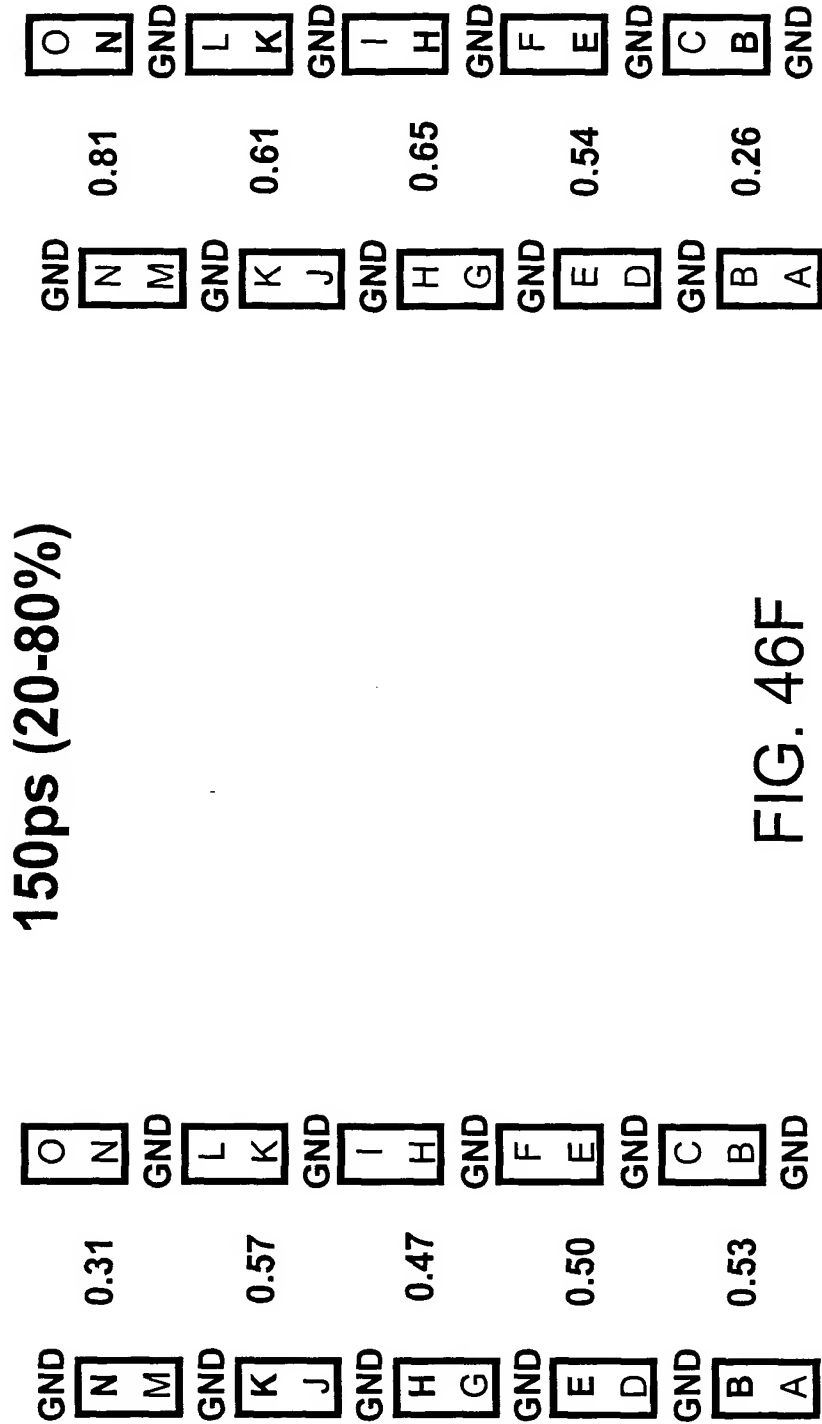


FIG. 46F